



U.S. Department of Transportation

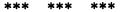
National Highway Traffic Safety Administration

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If you requested NHTSA to query its database files in order to identify a specific crash, then that query was made using non-personal descriptors you provided for use in our search. This motor vehicle crash may have been identified from a data search and matches the general, non-personal descriptors you provided, but we cannot confirm that this is the specific crash report you requested.

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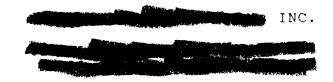
# NATIONAL CAPITOL SYSTEMS, INC.

AIRBAG INVESTIGATION

CASE NO. 92-04



TECHNICAL REPORT



# AIRBAG INVESTIGATION

CASE NO. 92-04



Contract No. DTHN 22-87-C-17169

# Prepared for:

U.S. Department of Transportation National Highway Traffic Safety Administration Washington, D.C. 20590

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# NCSI In-Depth Accident Investigation Team Airbag Accident Investigation Case No. 92-04

#### SUMMARY

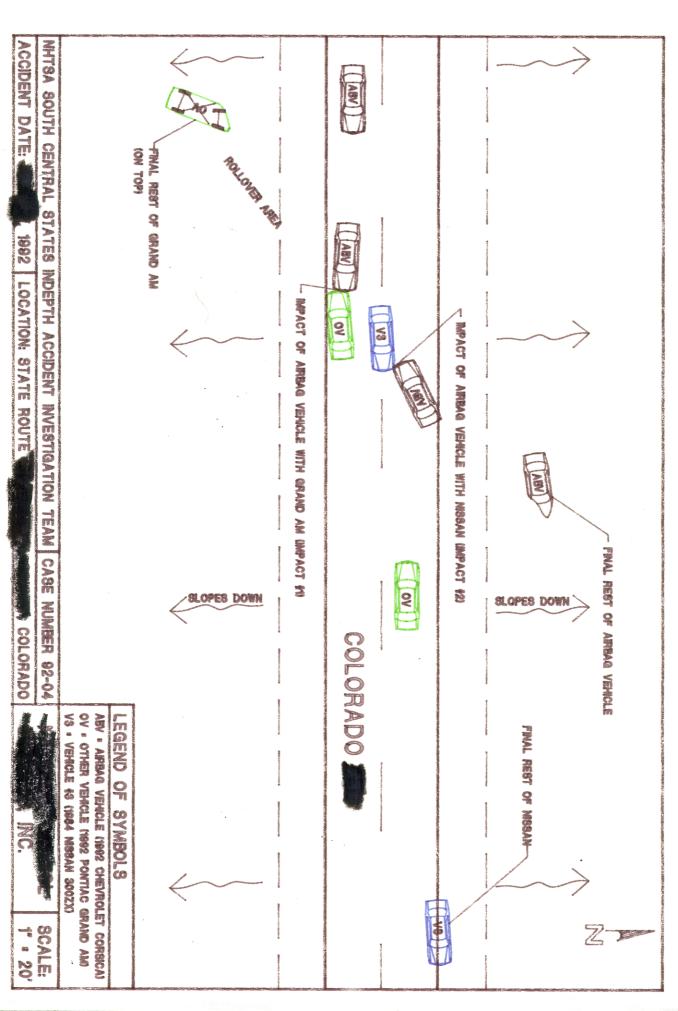
This is an in-depth study of an accident involving an airbag equipped 1992 Chevrolet Corsica, a 1992 Pontiac Grand Am, and a 1984 Nissan 300ZX. The accident occurred on 1992 at hours on Corollary State Route 1992, approximately miles east of 1992. In-depth scene and vehicle inspections were conducted on 1992.

According to the police accident report, the 1992 Grand Am was traveling west and the Corsica and 300ZX were traveling east. The Grand Am crossed over into the eastbound travel lane into the path of the oncoming Corsica. The front-right surface of the Grand Am impacted the front-right surface of the Corsica in a head-on impact in the eastbound travel lane. After the initial impact with the Grand Am, the Corsica rotated clockwise into the westbound lane and the front-left surface of the Corsica was impacted by the front-left surface of the 300ZX. Following the second impact, the Corsica departed the roadway on the north edge and came to rest north of the road heading east. After impacting the Corsica, the Grand Am rotated clockwise, departed the roadway on the south edge, rolled two quarter turns and came to rest on its top heading northeast. The 300ZX came to rest at the north edge of the north shoulder heading east.

In the vicinity of the accident, the State Route is a straight, level, two-lane, undivided asphalt roadway with a posted speed limit of 55 miles per hour.

The driver and front-right occupant of the Grand Am, as well as the front-right occupant of the Corsica were fatally injured. The driver of the airbag equipped Corsica suffered two foot fractures and other minor injuries, which were not life-threatening. The Driver of the 300ZX was not injured. All occupants of the vehicles in the accident were restrained by three-point lap and shoulder belt systems, and only the driver's position of the Corsica was equipped with an airbag.

A CDC of 12 FDEW-6 was assigned to the damage to the Corsica and the Grand Am. Maximum residual crush to the front of the Corsica was approximately 61 inches and about the same to the front of the Grand Am. Damaged components were too numerous to list in this summary.



# NCSI IN-DEPTH ACCIDENT INVESTIGATION AIRBAG ACCIDENT INVESTIGATION

FLEET - Private Owner
LOCATION - Colorado

CASE NO. - 92-04

**IDENTIFICATION** 

Location/Street:

State Route

Area/Type:

Rural

Accident Date/Time:

Notification Date:

1992

Investigating Police Agency: (

State Patrol

1992 at make hours

Accident Type:

Car / Car - Head-on

Air Bag Vehicle

Occupant Injury Severity:

Moderate (AIS-2)

AMBIENCE

Viewing Conditions:

Daylight

Weather:

Clear

Precipitation:

None

Road Surface:

Dry

ROADWAY

Location:

Arterial

Type:

24.25'

Width:

Two

Number of Lanes:

Median:

None

Surface Material:

Asphaltic aggregate

Road Edge:

Paved shoulders

Traffic Density:

Moderate

ROADWAY, CONTINUED

Coefficient Of Friction:

.65 (estimated)

Vertical Alignment:

Level (at impact)

Horizontal Alignment:

Straight

TRAFFIC CONTROLS

Signals/Signs:

None

Speed Limit:

55 miles per hour

**VEHICLES** 

Airbag Vehicle

Vehicle #2

Year:

1992

1992

Make:

Chevrolet

Pontiac

Model:

Corsica

Grand Am

Body Style:

Four-door sedan

Four-door sedan

V.I.N.:

1G1LT53T2

1G2NE54NON

Exterior Color:

White

Black

Odometer Reading:

4045.5

Unknown

Securiflex

Windshield:

Not equipped

Windshield Damage:

Yes

Engine:

Unknown

Transmission:

Automatic w/ floor mounted

selector

Steering:

Power-assisted

Brake System:

Power-assisted

Interior Padding:

Instrument panel, door panels, armrests, head restraints, sunvisors, upper "A" pillars,

steering wheel.

4

#### VEHICLES, CONTINUED

Driver Active
Restraint System
Availability:

Driver Active Restraint System

Usage:

Usage Source:

Passive Restraint System:

ge:

PAR and vehicle inspection

Active three-point lap and shoulder belt

Lap and shoulder belt

Driver airbag

#### VEHICLE DAMAGE

Object Struck:

Airbag Vehicle

Vehicle #2

One

Damage Location:

CDC:

Event Number:

Tow Status:

Exterior Damage:

venicie #2

Front

12-FDEW-6

Towed

The frontal surface of the airbag vehicle struck the frontal surface of the Grand Am in a head-on impact. Direct damage and direct plus induc-ed damage extended a length of 52.0 inches across the frontal plane of the Corsica. Maximum residual crush to the frontal surface was approximately 61 inches, located at C6. Crush measurements taken across the frontal plane were:

C1 = 15.0 inches C2 = 21.2 inches C3 = 30.0 inches C4 = 37.1 inches C5 = 44.2 inches C6 = 61.2 inches Vehicle #2

Airbag vehicle

One

Front

12-FDEW-6

Towed

The frontal surface of the Grand Am struck the frontal surface of the Corsica in a head-on impact. The vehicle was not inspected by the author of this report. Damage was estimated from police photographs of the vehicle. Direct and direct plus induced damage extended a length of approxi-mately 60 inches across the frontal plane of the vehicle. Maximum residual crush to the frontal surface was estimated to be approximately 65 inches, located at C6.

### VEHICLE DAMAGE, CONTINUED

Damaged

Components:

Damaged components included all frontal components, grille, hood, windshield, doors, roof, etc.

See photos.

Interior Damage:

The steering assembly was broken at the point where the column enters the instrument panel. The most severe intrusions were: left instrument panel (7.75"), center instrument panel (12.0"), right instrument panel (22.0"), right side A pillar (26.5"), right front toe pan (22.0"), right front windshield (14.75"), right front windshield header (11.0"), and right front side panel (10.0").

Damaged components included all frontal components, hood, grille, windshield, roof, engine, etc. See photos.

The Grand Am was not inspected, but from police photographs, the intrusions appeared to be similar to the Corsica.

#### COLLISION SEQUENCE

Pre-crash:

At approximately hours on 1992, the case vehicle, a 1992 Chevrolet Corsica equipped with a driver airbag supplemental restraint system, was traveling east on state route in rural Colorado.
A 1992 Pontiac Grand Am was traveling west on route em in rural Colorado For unknown reasons, the Grand Am drifted across the center line and into the westbound travel lane.

Crash:

The frontal surface of the Corsica struck the frontal surface of the Grand Am in a nearly full-frontal head-on impact.

Post-crash:

After the impact with the Grand Am, the Corsica rotated clockwise and traveled into the westbound travel lane where the frontleft corner of the Corsica was struck by the front-left corner of a Nissan 300 ZX which was traveling east. Following the second impact, the Corsica departed the road and came to rest approximately 10 feet north of the road headed east.

Post-crash, continued

After striking the Corsica, the Grand Am rotated clockwise, overturned, and departed the road on the south side. It came to rest south of the road on its top headed northeast. The 300 ZX Came to rest on the north shoulder headed east.

Police Activities:

The Patrol was notified of the accident at hours and a Patrol unit arrived on the scene at hours.

Rescue Activities:

The front-right occupant of the Corsica, and the driver and front-right occupant of the Grand Am were pronounced dead at the scene. The driver of the Corsica was transported by ambulance to a local hospital. The driver of the 300 ZX was not injured. The Corsica and Grand Am were towed from the accident site and the 300ZX was driven away following the police investigation of the accident.

#### VEHICLE VELOCITY ESTIMATES

A CRASH 3 computer reconstruction of the accident yielded a speed change (Delta-V) of 43 miles per hour for the Corsica, with a longitudinal speed change of -43 miles per hour and a lateral speed change of 4 miles per hour. Delta-V values for the Grand Am were 41 miles per hour for total Delta-V with -41 miles per hour for the longitudinal component and -4 miles per hour for the lateral component. These values should be considered as estimates because the C values for the Grand Am were estimated from police photographs.

#### RELEVANT SAFETY ISSUES

#### Applicable Standards: FMVSS 208:

Occupant Crash Protection: The 1992 Chevrolet Corsica was equipped with a factory installed driver supplemental airbag restraint system. The driver airbag was deployed during the crash, reducing the severity of the injuries to the driver.

#### HUMAN FACTORS/OCCUPANT DATA/AIRBAG VEHICLE

#### DRIVER DATA

52 Age:

Female Sex:

Height: 67 inches

130 lbs. Weight:

Housewife Occupation:

Active Restraint

Three-point lap System Usage: and shoulder belt

Police Accident Report

Usage Source:

Apparently normal Vision:

Vehicle Familiarity: This trip only

Route Familiarity: Unknown

Manner of Leaving Scene: Ambulance

Type of Medical Treatment: Unknown

Apparently normal Physical State:

Psychological State: Apparently normal

#### DRIVER INJURIES

Severity Source Injury Description

Fractures of the heels

Moderate (AIS-2) of both feet Floor

# Injury Coding

	O.I.C. Body Region	Aspect	Lesion		A.I.S. Severity		Direct/ Indirect Injury
1st	Q	R	F	S	2	56	1
2nd	Q	L.	F	S	2	56	1

#### DRIVER KINEMATICS

The driver was apparently seated in a normal position and was fully restrained by the active three-point lap and shoulder belt system of the Corsica. In response to the frontal impact force she moved forward relative to the vehicle interior, striking the deployed airbag. Her feet impacted the floor, fracturing both feet.

# HUMAN FACTORS / OCCUPANT DATA / AIRBAG VEHICLE / OCCUPANT #2

#### OCCUPANT DATA

Age: 73

Sex: Male

Height: 73 inches

Weight: 200 lbs.

Occupation: Minister

Active Restraint

System Usage: Three-point lap and shoulder belt

Usage Source: Police Accident Report

and vehicle inspection

Manner of Leaving Scene: Unknown

Type of Medical Treatment: Dead at scene

#### OCCUPANT KINEMATICS

The front-right occupant of the Corsica was restrained by the active three-point lap and shoulder belt system of the Corsica. Upon impact with the Grand Am, he moved forward relative to the vehicle interior, striking the right instrument panel which was intruded approximately 22 inches. He also struck the center dash, floor, right side door, and right side door hardware. The force of the intruding right front components moved the front-right seat rearward until the back of the front seat was resting against the frontal surface of the rear-right seat cushion. This occupant suffered fatal injuries in the crash.

# HUMAN FACTORS / OCCUPANT DATA / VEHICLE #2

DRIVER DATA

Age: 51

Sex: Female

Height: Unknown

Weight: Unknown

Active Restraint

System Usage: Three-point lap

and shoulder belt

Usage Source: Police Accident Report

Manner of Leaving Scene: Unknown

Type of Medical Treatment: Dead at scene

DRIVER INJURIES

The driver of the Grand Am suffered unknown fatal injuries in the crash.

HUMAN FACTORS / OCCUPANT DATA / VEHICLE #2 / OCCUPANT #2

OCCUPANT DATA

Age: 57

Sex: Male

Height: Unknown

Weight: Unknown

Active Restraint

System Usage: Three-point lap

and shoulder belt

Usage Source: Police Accident Report

Manner of Leaving Scene: Unknown

Type of Medical Treatment: Dead at scene

OCCUPANT INJURIES

The front-right occupant of the Grand Am suffered unknown fatal injuries in the crash.

#### HUMAN FACTORS / OCCUPANT DATA / VEHICLE #3

#### DRIVER DATA

57 Age:

Sex: Male

Height: Unknown

Weight: Unknown

Active Restraint

Three-point lap and shoulder belt System Usage:

Usage Source: Police Accident Report

Manner of Leaving Scene: Drove vehicle

Type of Medical Treatment: Not injured

#### LIST OF ATTACHMENTS

Appendix A: Police Accident Report

Appendix B: NASS Data Collection Forms

Appendix C: Airbag Supplement Form

Appendix D: Newspaper Article

Appendix E: CRASH 3 Output

# OTHER SOURCES OF DATA

Interview with friend of airbag vehicle occupants

#### SELECTED PRINTS NCSI Case No. 92-04

- 1. Pre-impact travel path of the 1992 Chevrolet Corsica (airbag equipped vehicle) east on Route
- Area of impact with the 1992 Pontiac Grand Am and 1984 Nissan 300 ZX.
- 3-5. Path of Corsica from impacts to final rest.
- 6. Opposite view from beyond impacts.
- 7. Pre-impact travel path of the 1992 Pontiac Grand Am, west on the second seco
- 8. Path of Grand Am across the centerline into the eastbound travel lane.
- 9. Grand Am at impact with the Corsica.
- 10-11. Path of Grand Am from impact with the Corsica to rollover and final rest.
- 12-13. Opposite views from beyond impacts.
- 14. Path of the Nissan 300ZX into impact with the Corsica.
- 15. 300ZX at impact with the Corsica.
- 16. Path of 300ZX from impact to final rest.
- 17-19. Frontal views of the airbag equipped 1992 Chevrolet Corsica showing crush from impact with the Grand Am.
- Front-right overall view of the Corsica.
- 21. Right side view showing rearward displacement of the A pillar.
- 22. Rear-right overall view.
- 23. Rear-left overall view.
- 24. Front-left overall view.
- 25-26. Close-up views of occupant contacts to the deployed driver airbag. Lipstick and make-up appear near the center of the airbag. Blood on the airbag may be from the front-right occupant and probably occurred after the crash.
- 27. Driver's door of the Corsica showing occupant contact to the door surface.
- View of the lower left front instrumental panel and below showing possible occupant contacts to the dash and floor.

- 29-31. Views of the center and right instrument panel and below showing occupant contacts to the dash, emergency brake handle, and floor.
- View of right front occupant space showing occupant contacts to the door, A pillar, armrest and B pillar.

# SLIDE INDEX NCSI Case 92-04

# SCENE SLIDES

1-2.	Pre-impact travel path of the 1992 Chevrolet Corsica (equipped with a driver airbag) east Route in rural
3.	Area of impact (in the eastbound travel lane) of the frontal surface of the Corsica with the frontal surface of a 1992 Pontiac Grand Am.
4.	Path of the Corsica from impact with the Grand Am to impact with a $1984\ \text{Nissan}\ 300\text{ZX}.$
5.	Area of impact with the Nissan.
6-7.	Path of the Corsica from impacts to final rest and final rest area.
8-9.	Opposite views from beyond impact and final rest.
10.	Pre-impact travel of the 1992 Pontiac Grand Am west on
11.	Path of the Grand Am across the centerline and into the westbound travel lane.
12.	Area of impact of the Grand Am with the Corsica.
13-14.	Path of Grand Am from impact with the Corsica to rollover and final rest.
15.	Opposite view from beyond impact with the Corsica.
16.	Opposite view from beyond rollover and final rest.
17.	Path of the Nissan east oninto impact. Dark skids at scene are from the Nissan.
18.	Aven of impact of the Nicona with the Coverign
	Area of impact of the Nissan with the Corsica.

#### VEHICLE SLIDES

- 20-23. Frontal views of the 1992 Chevrolet Corsica, equipped with a driver airbag showing damage from impact with the Grand Am (most of entire front), and 300ZX (front-left corner).
- 24. Front-right overall view.
- 25-29. Right side views showing rearward deformation of frontal and right side components.
- 30. Rear-right overall view.
- 31. Rear-left overall view.
- 32. Left side overall view.
- 33. Front-left overall view.
- 34. View of damage to windshield.
- 35-36. Views of occupant contacts to driver's door.
- 37. Overall view looking through driver's door.
- 38-40. Views of steering assembly showing damage to steering column.
- 41-42. Views of occupant contacts to left dash and floor.
- Views of front-center and front-right seat positions showing occupant contacts to center and right dash, floor, door and door armrest, side panel, and upper right A pillar.
- 54-55. Views of occupant contacts to deployed airbag.
  Lipstick marks are seen near the center of the airbag and blood os present on the right side of the airbag.
- View of driver's three-point lap and shoulder belt restraint system showing stretching of the belt webbing.
- View of the front-right occupant's three-point lap and shoulder belt system which was cut by rescue personnel.



















































































































## POLICE PHOTOGRAPH INDEX NCSI 92-04

- Photo of the accident site looking along the pre-impact travel path of the airbag equipped 1992 Chevrolet Corsica and 1984 Nissan 300ZX, east on rural .
- Area of impact of the Corsica with the 1992 Pontiac Grand Am and the 1984 Nissan 300ZX, looking east. The photo shows the Corsica at final rest north of the road.
- 3. Photo of the area of both Corsica impacts and path of Corsica from impact to final rest.
- 4-5. Photos of the Corsica at final rest.
- Photo of the accident site looking along the pre-impact travel path of the 1992 Pontiac Grand Am, west on
  This photo also shows the Grand Am at final rest south of the road and the Corsica at final rest north of the road.
- 7. Area of impact of the Grand Am with the Corsica and rollover and final rest of the Grand Am.
- 8. Photo of the Grand Am at final rest.
- 9. Opposite view from beyond final rest of the Grand Am looking back toward impact area. This photo also shows the Corsica at final rest.
- 10. Opposite view photo from beyond final rest of the 300ZX at the north edge of the road. This photo also shows the Corsica at final rest.
- 11-12. Photo of damage to the Grand Am taken at the police impound yard.

















































































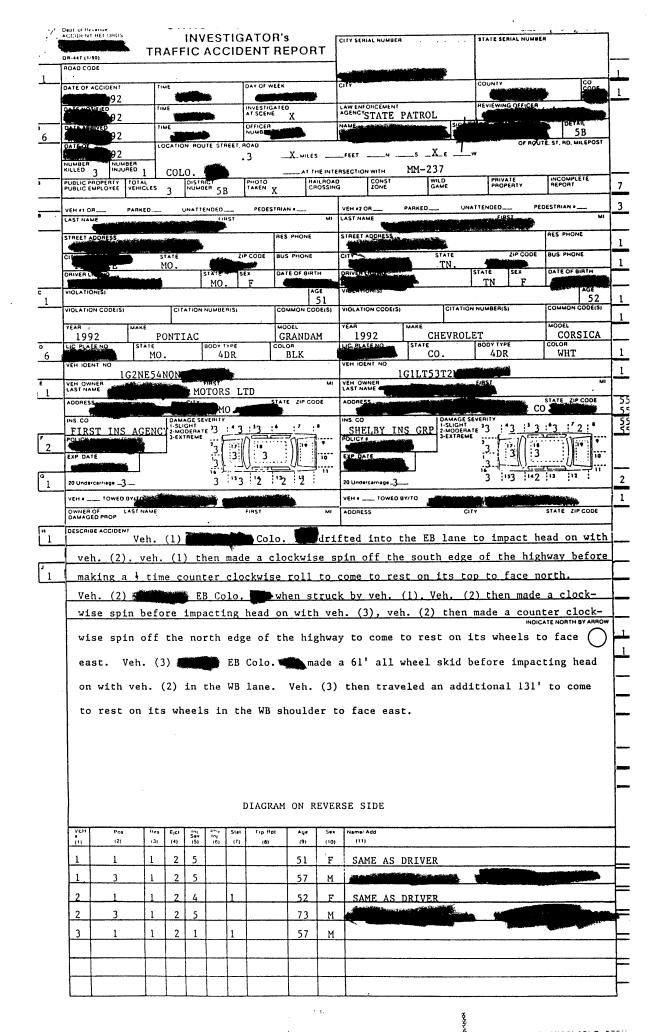




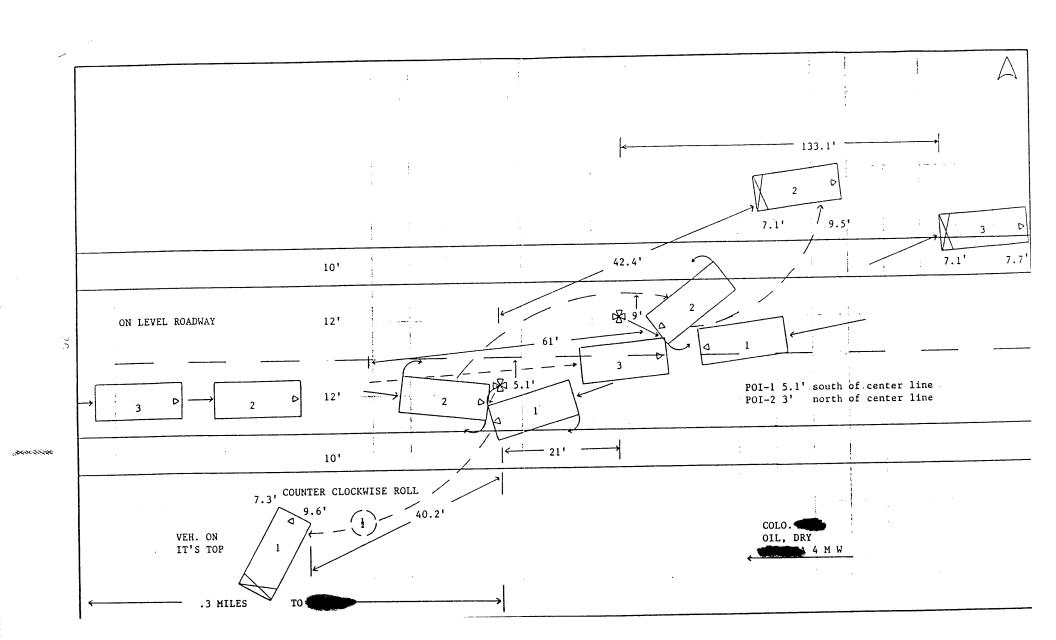


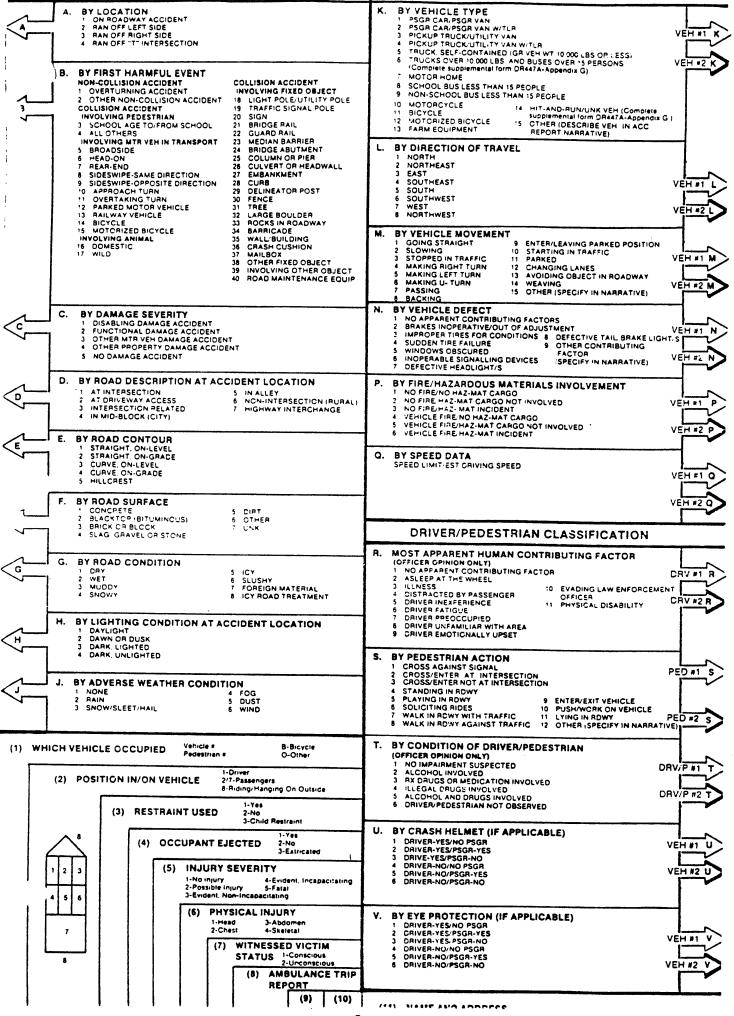


## Appendix A Police Accident Report



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Appendix B

NASS Data Collection Forms

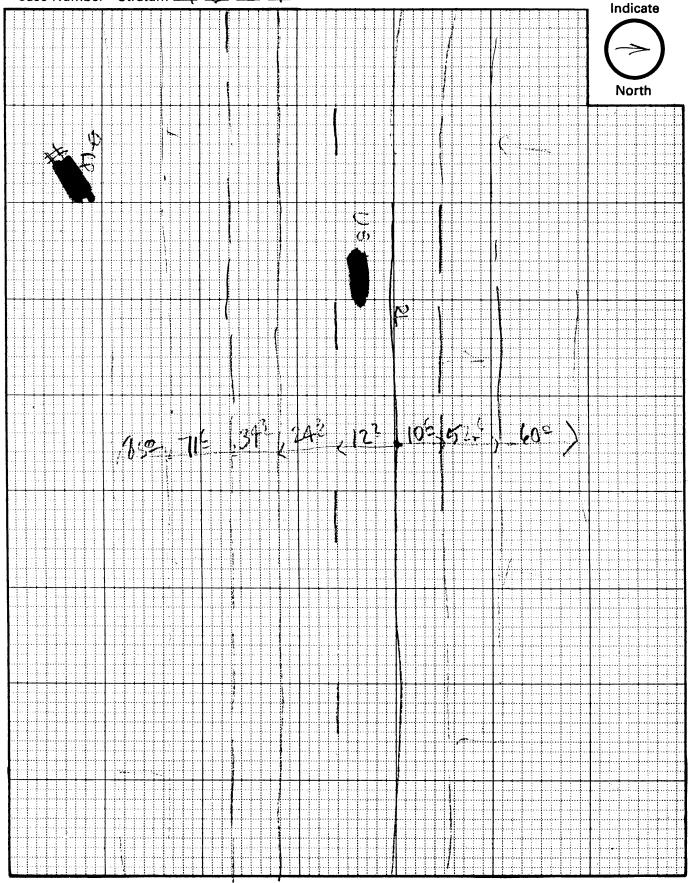


National Highway Traffic Safety Administration

#### **ACCIDENT COLLISION DIAGRAM**

BEST AVAILABLE COPY

PSU No. NC 2I. Case Number – Stratum 9 2 – 6 4





# ACCIDENT COLLISION MEASUREMENT TABLE

NATIONAL ACCIDENT SAMPLING SYSTEM CRASHWORTHINESS DATA SYSTEM

Primary Sampling Unit Number NCSI

Case Number-Stratum 92-04

ACCIDENT COLL	ISION DIAGRAM   LEVEL II (Cont'd)	CRASH DATA
PHYSICAL EVIDENCE ABSENT	physical evidence is present:	VEH. #1 VEH. #2 VEH. #3
To be accomplished when there is no physical evidence present at the scene;	<ul> <li>document reference point and reference line relative to physical features present at the scene</li> </ul>	Heading Angle 2 <u>65</u> 095 095
<ul> <li>approximate vehicle orientation at impact and final rest</li> </ul>	scale documentation of all accident induced physical evidence	
* applicable road/roadway delineation (e.g., curbs/edge lines, lane markings, median markings, pavement markings, stc.)	* scaled documentation of all roadside objects contacted	Surface Type
<ul> <li>applicable traffic controls (e.g., speed limit)</li> </ul>	* roadway surface type and condition of applicable roadways	Condition
* north arrow placed on diagram	* grade measurements for all applicable roadways and at location of rollover	Grade (v/h) Measurement
* sketch required	initiation	(between impact and final rest)
LEVEL II PHYSICAL EVIDENCE PRESENT	<ul> <li>scaled representations of the vehicle(s) at pre-impact, impact, and final rest based upon either:</li> </ul>	Grade (v/h) Measurement
In addition to the level I tasks noted above, the following must be accomplished when	a) physical evidence, or	(at location of rollover initiation)

b) reconstructed accident dynamics

Reference line:

Item	Distance and Direction from Reference Point	Distance and Direction from Reference Line
GOUGE #1 IN W/BLAME	522E-5A2E	54N-48N
11 11 2 2 11 11	545 E -560 E	37N-25N
SKIDS IN W/B LN#1 LRYZ	44E-474E	5°N - 3"N
#IALRYZ	517 E	26,
#2A RRY2	53 <sup>5</sup> €	0
# 2B RRV2	569 E	105
#26 RAV2	5925	5-5
#10 LRV	579E	12N
#1D LEV2	1126	6
北区 LRV2	62"E	265

Item	Distance and Direction from Reference Point	Distance and Direction from Reference Line
604GE3 IN E/B 160 #1	159E-16"E	28-5-2825
#2	175E- 186E	245-2435
#3	1711E- 192E	2795-2725
<b></b>	184E-20-6	26-5-24-5
#5	255E-284E	20105-1965
#6	305E-32-E	2065-1965
<b>共</b> 7	2810E-302E	17-5-1635
#8	3019E-35-E	1745-1695
SKID PRV2	475=-525	1275-1095
LRYKAS ESSHLD	148 E	3435
11 11 O TRIP PT.?	66 =	3935
7 0 10 0	(O	4245
SPIL O V2 FREST	61°E	14ªN
RR V2 FREST		
V3 SKIDS LEBEGIN	0 <u>10</u> E	13-5
- 11 11 RF 11	247 €	1595
11 11 0 500 E	50º E	945 / 14-5
11 11 @ 79'E	796E	765 & 1235
" " END	90°E	6-58 1175
[ROAD 1+AG 3/8" IN 24" CROW	N	
SUDDERT HAVE 3/8 IN 74"	CROWN	
SOUTH DITCH SLOPE	45/6" IN 24"	
NORTH "	43/16" (N 24"	



U.S. Department of Transportation National Highway Traffic Safety Administration

#### **ACCIDENT FORM**

NATIONAL ACCIDENT SAMPLING SYSTEM CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

NCST

2. Case Number - Stratum

92-04

#### **IDENTIFICATION**

3. Number of General Vehicle Forms Submitted

03

4. Date of Accident (Month, Day, Year)



5. Time of Accident



Code reported military time of accident.

NOTE: Midnight = 2400

Unknown = 9999

#### **SPECIAL STUDIES - INDICATORS**

Check (/) each special study (SS12-SS16 below) that has been completed; code 1 for the checked special studies and 0 for the special studies not checked.

6. \_\_\_SS12 Not Active

\_0\_

7. \_\_\_SS13 Not Active

0

8. SS14 Fatal AOPS

1

9. SS15

0

10. SS16

<u>O</u>

#### **NUMBER OF EVENTS**

11. Number of Recorded Events in This Accident

03

Code the number of events which occurred in this accident.

#### **ACCIDENT EVENTS**

For each event that occurred in the accident, code the lowest numbered vehicle in the left columns and the other involved vehicle or object on the right.

Sec	ent Event quence umber	Vehicle Number	Class Of Vehicle	General Area of Damage	Vehicle Number or Object Contacted	Class Of Vehicle	General Area of Damage
120	) 1	13. <u>()                                   </u>	14. <u>0</u> <u>2</u>	15. <u> </u>	16. <u>@ Z</u>	17. <u>0 2</u>	18. <u> </u> F
190	2	20. 🚫 📗	21. <u>0 2</u>	22. 工	23. 3 1	24. 00	25. 🄼
26. <u>(</u>	3	27. 02	28. <u>D Z</u>	29. <u>F</u>	30. <u>Ø</u> 3	31	32. <u> </u>
330	) 4	34	35	36	37	38	39
400	5	41	42	43	44	45	46

IF GREATER THAN FIVE EVENTS, CONTINUE CODING ON THE ACCIDENT EVENT SUPPLEMENT

## CODES FOR CLASS OF VEHICLE

- (00) Not a motor vehicle
- (01) Subcompact/mini (wheelbase < 100 inches)
- (02) Compact (wheelbase = 100 104 inches)
- (03) Intermediate (wheelbase = 105 109 inches)
- (04) Full size (wheelbase = 110 114 inches)
- (05) Largest (wheelbase ≥ 115 inches)
- (09) Unknown passenger car size
- (11) Compact utility vehicle
- (12) Large utility vehicle (≤ 10,000 lbs GVWR)
- (13) Passenger van (≤ 10,000 lbs GVWR)
- (14) Other van (≤ 10,000 lbs GVWR)
- (15) Pickup truck (≤ 10,000 lbs GVWR)
- (18) Other truck (≤ 10,000 lbs GVWR)
- (19) Unknown light truck type
- (20) School bus
- (21) Other bus
- (22) Truck (> 10,000 lbs GVWR)
- (23) Tractor without trailer
- (24) Tractor-trailer(s)
- (25) Motored cycle
- (28) Other vehicle
- (99) Unknown

#### CODES FOR GENERAL AREA OF DAMAGE (GAD)

# CDS APPLICABLE AND OTHER VEHICLES

- (O) Not a motor vehicle
- (N) Noncollision
- (F) Front
- (R) Right side
- (L) Left side
- (B) Back
- (T) Top
- (U) Undercarriage
- (9) Unknown

## TDC APPLICABLE VEHICLES

- (0) Not a motor vehicle
- (N) Noncollision
- (F) Front
- (R) Right side
- (L) Left side
- (B) Back of unit with cargo area (rear of trailer or straight truck)
- (D) Back (rear of tractor)
- (C) Rear of cab
- (V) Front of cargo area
- (T) Top
- (U) Undercarriage
- (9) Unknown

#### CODES FOR VEHICLE NUMBER OR OBJECT CONTACTED

(01-30) - Vehicle Number

#### **Noncollision**

- (31) Overturn rollover
- (32) Fire or explosion
- (33) Jackknife
- (34) Other intraunit damage (specify):
- (35) Noncollision injury
- (38) Other noncollision (specify):
- (39) Noncollision details unknown

#### **Collision With Fixed Object**

- (41) Tree (≤ 4 inches in diameter)
- (42) Tree (> 4 inches in diameter)
- (43) Shrubbery or bush
- (44) Embankment
- (45) Breakaway pole or post (any diameter)

#### Nonbreakaway Pole or Post

- (50) Pole or post ( $\leq$  4 inches in diameter)
- (51) Pole or post (> 4 inches but ≤ 12 inches in diameter)
- (52) Pole or post (> 12 inches in diameter)
- (53) Pole or post (diameter unknown)
- (54) Concrete traffic barrier
- (55) Impact attenuator
- (56) Other traffic barrier (includes guardrail) (specify):

- (57) Fence
- (58) Wall
- (59) Building
- (60) Ditch or culvert
- (61) Ground
- (62) Fire hydrant
- (63) Curb
- (64) Bridge
- (68) Other fixed object (specify):
- (69) Unknown fixed object

#### Collision with Nonfixed Object

- (71) Motor vehicle not in-transport
- (72) Pedestrian
- (73) Cyclist or cycle
- (74) Other nonmotorist or conveyance
- (75) Vehicle occupant
- (76) Animal
- (77) Train
- (78) Trailer, disconnected in transport
- (88) Other nonfixed object (specify):
- (89) Unknown nonfixed object
- (98) Other event (specify):
- (99) Unknown event or object



National Highway Traffic Safety Administration

### **ACCIDENT LOG**

NATIONAL ACCIDENT SAMPLING SYSTEM CRASHWORTHINESS DATA SYSTEM

TO BE COMPLETED BY TEAM	DATA STATUS OF VARIABLE NUMBERS 1-81
1. PSU Number	1 2 3 4 5 6 7 8 9 10 11
2. Case Number-Stratum 92-04	
3. Assigned Researcher Number	12 12 12 12
4. PSU Reviewer Number	12 13 14 15 16 17 18
5. Sample Date	
6. Date Scene Field Work Completed	19 20 21 22 23 24 25
TO BE COMPLETED BY ZONE CENTER	
7. Assessment Of Complexity Of Scene (1) Level 1	26 27 28 29 30 31 32
Level 2 (2) Routine (3) Difficult	33 34 35 36 37 38 39
8. Field Documentation Of Physical Plant (0) Not applicable	40 41 42 43 44 45 46
<ul><li>(1) Substandard</li><li>(2) Standard</li><li>(3) Above standard</li></ul>	47 48 49 50 51 52 53
Field Documentation Of Physical Evidence     (0) Not applicable     (1) Substandard	47 48 49 50 51 52 53
(2) Standard (3) Above standard	54 55 56 57 58 59 60
10. Quality Of Scene Diagram (0) Not applicable (1) Substandard (2) Standard (3) Above standard	61 62 63 64 65 66 67
11. Scene Slides Subject Quality	68 69 70 71 72 73 74
(0) Not applicable (1) Substandard (2) Standard (3) Above standard	75 76 77 78 79 80 81
12. Scene Slides Quality (0) Not applicable (1) Substandard (2) Standard	Data Status Codes:
13. Number Of Researcher Coded Events  14. Number Of Events Added By Zone Center  15. Number Of Events Deleted By Zone Center  16. Correct Stratum Character	(Blank) Correct (1) Derived error (2) Non-correctable error (3) Correctable error (4) Change—no error (5) Sequencing error (7) Incorrect edit override (8) MDE error (9) Unknown coded

National Highway Traffic Safety Administration

#### **GENERAL VEHICLE FORM**

NATIONAL ACCIDENT SAMPLING SYSTEM CRASHWORTHINESS DATA SYSTEM

diminoration .	
1. Primary Sampling Unit Number NC5I	11. Police Reported Alcohol Presence (0) No alcohol present
2. Case Number - Stratum 92-04	(1) Yes (alcohol present)
	(7) Not reported (8) No driver present
3. Vehicle Number	(9) Unknown
VEHICLE IDENTIFICATION	Note: See variables 37 through 55
4. Vehicle Model Year 9 2	(Page 4) for information on Other Drugs
Code the last two digits of the model year	12. Alcohol Test Result For Driver
(99) Unknown	Code actual value (decimal implied
5. Vahiola Maka (specify):	before first digit—0.xx) (95) Test refused
J. Veilicle Make (specify).	(96) None given
Applicable codes are found in your	(97) AC test performed, results unknown (98) No driver present
NASS Data Collection, Coding and Editing Manual.	(99) Unknown
(99) Ünknown	Source: PAC
6. Vehicle Model (specify):	ACCIDENT RELATED
Applicable codes are found in your	13. Speed Limit 55
NASS Data Collection, Coding and	(00) No statutory limit
Editing Manual. (999) Unknown	Code posted or statutory speed limit (99) Unknown
	(55) STIKITOVII
7. Body Type (7) 4	14. Attempted Avoidance Maneuver $\frac{99}{9}$
Note: Applicable codes may be found on the back of this page.	(00) No impact (01) No avoidance actions
the back of this page.	(02) Braking (no lockup)
8. Vehicle Identification Number	(03) Braking (lockup) (04) Braking (lockup unknown)
	(05) Releasing brakes
1G2NE54NO	(06) Steering left (07) Steering right
Left justify; Slash zeros and letter Z (0 and Z)	(08) Braking and steering left
No VIN—Code all zeros Unknown—Code all nine's	(09) Braking and steering right (10) Accelerating
CHANGWII CODE DII TIME 3	(11) Accelerating and steering left
OFFICIAL RECORDS	(12) Accelerating and steering right (97) No driver present
9. Police Reported Vehicle Disposition	(98) Other action (specify):
(0) Not towed due to vehicle damage	(99) Unknown
(1) Towed due to vehicle damage (9) Unknown	
(a) Chianetti	15. Accident Type Applicable codes may be found on the
10. Police Reported Travel Speed 99	back of page two of this field form
	(00) No impact Code the number of the diagram that
Code to the nearest mph (NOTE: 00 means less than 0.5 mph)	best describes the accident circumstance
(97) 96.5 mph and above	(98) Other accident type (specify):
(99) Unknown	(99) Unknown
**** SKIP TO VARIABLE GV37 IF (	GV07 DOES NOT EQUAL 01-49 ****

#### **CODES FOR BODY TYPE**

#### CDS APPLICABLE VEHICLES

#### Automobiles

- (01) Convertible (excludes sun-roof, t-bar)
- (02) 2-door sedan, hardtop, coupe
- (O3) 3-door/2-door hatchback
- (04) 4-door sedan, hardtop
- (05) 5-door/4-door hatchback
- (06) Station wagon (excluding van and truck based)
- (07) Hatchback, number of doors unknown
- (08) Other automobile type (specify):
- (09) Unknown automobile type

#### Automobile Derivatives

- (10) Auto based pickup (includes El Camino, Caballero, Ranchero, Brat, and Rabbit pickup)
- (11) Auto based panel (cargo station wagon, auto based ambulance/hearse)
- (12) Large limousine more than four side doors or stretched chassis
- (13) Three-wheel automobile or automobile derivative

#### Utility Vehicles (≤ 10,000 lbs GVWR)

- (14) Compact utility (Jeep CJ-2 CJ-7, Scrambler, Golden Eagle, Renegade, Laredo, Wrangler, Cherokee [84 and after], Dispatcher, Raider, Bronco II, Bronco [76 and before], Explorer, S-10 Blazer, Geo Tracker, Bravado, S-15 Jimmy, Thing, Pathfinder, Trooper, Trooper II, Rodeo, Amigo, Navajo, 4-Runner, Montero, Samurai, Sidekick, Rocky)
- (15) Large utility (includes Jeep Cherokee [83 and before], Ramcharger, Trailduster, Bronco-fullsize [78 and after], fullsize Blazer, fullsize Jimmy, Landcruiser, Rover, Scout)
- (16) Utility station wagon (Chevy Suburban, GMC Suburban, Travelall, Grand Wagoneer, includes suburban limousine)
- (19) Utility, unknown body type

#### Van Based Light Trucks (≤ 10,000 lbs GVWR)

- (20) Minivan (Chrysler Town and Country, Caravan, Grand Caravan, Voyager, Grand Voyager, Mini-Ram, Dodge/Plymouth Vista, Aerostar, Lumina APV, Trans Sport, Silhouette, Astro, Safari, Toyota Van, Toyota Minivan, Previa, Nissan Minivan, Mitsubishi Minivan, Vanagon/Camper.)
- (21) Large van (B150-B350, Sportsman, Royal, Maxiwagon, Ram, Tradesman, Voyager [83 and before], E150-E350, Econoline, Clubwagon, Chateau, G10-G30, Chevy Van, Beauville, Sport Van, G15-G35, Rally Van, Vandura.)
- (22) Step van or walk-in van (≤ 10,000 lbs GVWR)
- (23) Van based motorhome (≤ 10,000 lbs GVWR)
- (28) Other van type (Hi-Cube Van, Kary) (specify):
- (29) Unknown van type

### Light Conventional Trucks (Pickup style cab, ≤ 10,000 lbs GVWR)

- (30) Compact pickup (D50, Colt P/U, Ram 50, Dakota, Arrow Pickup [foreign], Ranger, Courier, S-10, T-10, LUV, S-15, T-15, Sonoma, Datsun/Nissan Pickup, P'up, Mazda Pickup, Toyota Pickup, Mitsubishi Pickup)
- (31) Large Pickup (Jeep Pickup, Comanche, Ram Pickup, D100-D350, W100-W350, F100-F350, C10-C35, K10-K35, R10-R35, V10-V35, Silverado, Sierra, R100-R500,)
- (32) Pickup with slide-in camper
- (33) Convertible pickup
- (39) Unknown pickup style light conventional truck type

#### Other Light Trucks (≤ 10,000 lbs GVWR)

- (40) Cab chassis based (includes rescue vehicles, light stake, dump, and tow truck)
- (41) Truck based panel
- (42) Light truck based motorhome (chassis mounted)
- (45) Other light conventional truck type
- (48) Unknown light truck type
- (49) Unknown light vehicle type (automobile, utility, van, or light truck)

#### **OTHER VEHICLES**

#### Buses (Excludes Van Based)

- (50) School bus (designed to carry students, not cross country or transit)
- (58) Other bus type (e.g., transit, intercity, bus based motorhome) (specify):
- (59) Unknown bus type

#### Medium/Heavy Trucks (> 10,000 lbs GVWR)

- (60) Step van (> 10,000 lbs GVWR)
- (61) Single unit straight truck (10,000 lbs < GVWR ≤ 19,500 lbs)
- (62) Single unit straight truck (19,500 lbs < GVWR ≤ 26,000 lbs)
- (63) Single unit straight truck (> 26,000 lbs GVWR)
- (64) Single unit straight truck, GVWR unknown
- (65) Medium/heavy truck based motorhome
- (67) Truck-tractor with no cargo trailer
- (68) Truck-tractor pulling one trailer
- (69) Truck-tractor pulling two or more trailers
- (70) Truck-tractor (unknown if pulling trailer)
- (78) Unknown medium/heavy truck type
- (79) Unknown truck type (light/medium/heavy)

### Motored Cycles (Does Not Include All-Terrain Vehicles/Cycles)

- (80) Motorcycle
- (81) Moped (motorized bicycle)
- (82) Three-wheel motorcycle or moped
- (88) Other motored cycle (minibike, motorscooter) (specify):
- (89) Unknown motored cycle type

#### Other Vehicles

- (90) ATV (All-Terrain Vehicle) and ATC (All-Terrain Cycle)
- (91) Snowmobile
- (92) Farm equipment other than trucks
- (93) Construction equipment other than trucks
- (97) Other vehicle type
- (99) Unknown body type

OCCUPANT RELATED	24. Rollover
16. Driver Presence in Vehicle (0) Driver not present	(0) No rollover (no overturning)
(1) Driver present (9) Unknown	Rollover (primarily about the longitudinal axis) (1) Rollover, 1 quarter turn only (2) Rollover, 2 quarter turns (3) Rollover, 3 quarter turns
17. Number of Occupants This Vehicle (00-96) Code actual number of occupants for this vehicle	(4) Rollover, 4 or more quarter turns (specify):
(97) 97 or more (99) Unknown	<ul><li>(5) Rolloverend-over-end (i.e., primarily about the lateral axis)</li><li>(9) Rollover (overturn), details unknown</li></ul>
18. Number of Occupant Forms Submitted 0.2	OVERRIDE/UNDERRIDE (THIS VEHICLE)
VEHICLE WEIGHT ITEMS	·-
19. Vehicle Curb Weight 0277 Code weight to nearest	25. Front Override/Underride (this Vehicle)  26. Rear Override/Underride (this Vehicle)
100 pounds. (010) Less than 1050 pounds	
(135) 13,500 pounds or more (999) Unknown	(0) No override/underride, or not an end-to-end impact
Source:	Override (see specific CDC) (1) 1st CDC
20. Vehicle Cargo Weight 9, 9 0	(2) 2nd CDC (3) Other not automated CDC (specify):
20. Vehicle Cargo Weight  Code weight to nearest  100 pounds.	
(00) Less than 50 pounds (97) 9,650 pounds or more	Underride (see specific CDC) (4) 1st CDC
(99) Unknown	(5) 2nd CDC (6) Other not automated CDC (specify):
RECONSTRUCTION DATA	· · · · · · · · · · · · · · · · · · ·
21. Towed Trailing Unit (0) No towed unit (1) Yes—towed trailing unit	(7) Medium/heavy truck or bus override (9) Unknown
(9) Unknown	HEADING ANGLE AT IMPACT FOR
22. Documentation of Trajectory Data	HIGHEST DELTA V
for This Vehicle (0) No	Values: (000)-(359) Code actual value (997) Noncollision
(1) Yes	(998) Impact with object (999) Unknown
23. Post Collision Condition of Tree or Pole (For Highest Delta V)	27. Heading Angle For This Vehicle 265
(0) Not collision (for highest delta V) with tree or pole (1) Not damaged	28. Heading Angle For Other Vehicle 095
(2) Cracked/sheared (3) Tilted <45 degrees	
(4) Tilted ≥45 degrees	
(5) Uprooted tree (6) Separated pole from base	
(7) Pole replaced (8) Other (specify):	
(9) Unknown	

Cate- gory	Configur- ation	ACCIDENT TYPES (Includes Intent)	
	A. Right Roadside Departure	DRIVE OFF CONTROL/ AVOID COLLISION SPE	05 CIFICS SPECIFICS ER UNKNOWN
Single Driver	B. Left Roadside Departure	DRIVE OFF CONTROL/ AVOID COLLISION SPE	10 CIFICS SPECIFICS IER UNKNOWN
-	C Forward Impact	PARKED VEH. STA. OBJECT PEDESTRIAN/ END SPE ANIMAL DEPARTURE OTHER	16 CIFICS SPECIFICS HER UNKNOWN
icway Iton	I) Rear-End	23 27 31	CH • 32) (EACH • 33)  CIFICS SPECIFICS UNKNOWN
II. Same Trafficway Same Direction	E Forward Impact	CONTROL/ CONTROL/ AVOID COLLISION WITH VEH. WITH OBJECT	SPECIFICS SPECIFICS OTHER UNKNOWN
	F. Sideswipe Angle	46 (EACH • 48) SPECIFICS OTHER	(EACH • 49) SPECIFICS UNKNOWN
ray ction	G Head-On	50 51 (EACH • 52) (EACH • 53)  SPECIFICS SPECIFICS UNKNOWN	
Same Trafficway Opposite Direction	H Forward Impact	CONTROL/ TRACTION LOSS  TRACTION LOS	(EACH • 62)(EACH • 63)  SPECIFICS SPECIFICS UNKNOWN
Ε	I Sideswipe Angle	65 (EACH • 66) (EACH • 67)  SPECIFICS SPECIFICS UNKNOWN  LATERAL MOVE OTHER	
Change Trafficway Vehicle Turning	J. Turn Across Path	68 71 70 73 72 INITIAL OPPOSITE INITIAL SAME DIRECTIONS DIRECTIONS	(EACH • 74) (EACH • 75)  SPECIFICS SPECIFICS UNKNOWN
≥ .	K. Turn Into Path	77 79 81 81 82 TURN INTO SAME DIRECTION TURN INTO OPPOSITE DIRECTIONS	(EACH • 84) (EACH • 85)  SPECIFICS SPECIFICS UNKNOWN
V Intersecting Paths (Vehicle Daimage)	L. Straight Paths	87 (EACH • 90) 88 89 SPECIFICS OTHER	(EACH • 91) SPECIFICS UNKNOWN
VI. Miscellaneous	M. Backing Etc.	92 93 OTHER VEH. 98 Other Accident T OR OBJECT 99 Unknown Accide VEH. 00 No Impact	

1	Secondary Highest
29. Basis for Total Delta V (highest)	32. Lateral Component of Delta V $\stackrel{+}{\bigcirc}$ $\bigcirc$ $4$
Delta V Calculated  (1) CRASH program—damage only routine  (2) CRASH program—damage and trajectory routine  (3) Missing vehicle algorithm  Delta V Not Calculated  (4) At least one vehicle (which may be this vehicle) is beyond the scope of an acceptable reconstruction program, regardless of collision conditions.  (5) All vehicles within scope (CDC applicable) of CRASH program but one of the collision conditions is beyond the scope of the CRASH program or other acceptable reconstruction technique, regardless of adequacy of damage data.  (6) All vehicle and collision conditions are within scope of one of the acceptable reconstruction programs, but there is insufficient data available.  COMPUTER GENERATED DELTA V  Secondary Highest  30. Total Delta V  At Nearest mph  (NOTE: 00 means less than 0.5 mph) (97) 96.5 mph and above (99) Unknown  31. Longitudinal Component of Delta V  At Nearest mph  (NOTE: 00 means greater than -0.5 and less than +0.5 mph) (±97) ±96.5 mph and above (—99) Unknown	32. Lateral Component of Delta V  - Nearest mph  (NOTE:OO means greater than
IS OLDMISS APPLICABLE FOR T	THIS VEHICLE? [/] YES [] NO AM SUMMARY INCLUDED? [/] YES [] NO
	an comment moropro: [, ] iro [ ] ito

<ul> <li>37. Police Reported Other Drug Presence <ul> <li>(0) No other drugs present</li> <li>(1) Yes (other drug present)</li> <li>(7) Not reported</li> <li>(8) No driver present</li> <li>(9) Unknown</li> </ul> </li> <li>38. Police Reported Observation/Perception <ul> <li>Test Type For Driver</li> <li>(0) No observation/perception test given</li> <li>(1) Drug recognition technician (DRT) <ul> <li>determination using DEC process</li> </ul> </li> <li>(2) Behavioral</li> <li>(3) Other physical observation/perception <ul> <li>determination (specify):</li> </ul> </li> </ul></li></ul>	0	DRUG EVALUATION CLASSIFICATION OTHER DRUGS TEST RESULTS FOR DRIVER  DEC Observation/ Specimen Perception Test Test Results Results Narcotic Drug 40. 41. 6 Depressant Drug 42. 43. 43. 7 Stimulant Drug 44. 45. 7 Hallucinogen Drug 46. 47. 7 Cannabinoid Drug 48. 49. 7 Phencyclidine (PCP) 50. 51. 7 Inhalant Drug 52. 53. 7 Other Drug (Excluding 54. 55. 6 Nicotine, Aspirin, Alcohol, Drugs Administered Post-Crash)
<ul> <li>(4) DEC process available, unknown if determination made</li> <li>(5) DEC process not available, unknown if other observation/perception test given</li> <li>(7) Other observation/perception test (specify): <ul> <li>(8) No driver present</li> </ul> </li> <li>39. Other Drug Specimen Test Type For Driver</li> <li>(0) No specimen test given</li> <li>(1) Blood test</li> <li>(2) Urine test</li> <li>(3) Other specimen tests (specify):</li> <li>(7) Unspecified specimen test</li> <li>(8) No driver present</li> <li>(9) Unknown if specimen test given</li> </ul>	Q	Codes For Observation/Perception Test Results  (0) No DEC observation/perception test given (1) Passed DEC observation/perception test (2) Failed DEC observation/perception test (3) DEC observation/perception test given— results unknown (8) No driver present (9) Unknown if DEC observation/perception test given  Codes for Specimen Test Results  (0) No specimen test given (1) Drug not found in specimen (2) Drug found in specimen (7) Specimen test given, results unknown or not obtained (8) No driver present (9) Unknown if specimen test given

OTHER DATA	61. Rollover Initiation Object Contacted 02
56. Driver's Zip Code	
(00000) Driver not present (00001) Driver not a resident of U.S. or territories Code actual 5-digit zip code (99999) Unknown	62. Location on Vehicle Where Initial Principal Tripping Force Is Applied  (0) No rollover (1) Wheels/tires (2) Side plane
57. Driver's Race/Ethnic Origin  (0) Driver not present (1) White (non-Hispanic) (2) Black (non-Hispanic) (3) White (Hispanic) (4) Black (Hispanic) (5) American Indian, Eskimo or Aleut (6) Asian or Pacific Islander (8) Other (specify):	(3) End plane (4) Undercarriage (5) Other location on vehicle (specify):  (8) Non-contact rollover forces (specify):  (9) Unknown  63. Direction of Initial Roll
(9) Unknown  58. Vehicle Special Use (This Trip) (0) No special use (1) Taxi (2) Vehicle used as school bus (3) Vehicle used as other bus (4) Military (5) Police (6) Ambulance	(0) No rollover (1) Roll right - primarily about the longitudinal axis (2) Roll left - primarily about the longitudinal axis (5) End-over-end (i.e., primarily about the lateral axis) (9) Unknown roll direction  PRECRASH DATA
(7) Hearse (8) Fire truck or car	FRECHASH DATA
	64. Pre-Event Movement (Prior to Recognition of Critical Event)
(8) Fire truck or car (9) Unknown  ROLLOVER DATA  If GV07 (Body Type) ≠ 1-49, leave GV59-GV63 blank. If GV24 (Rollover) = 0, then GV59-GV63 must equal 0. If GV24 = 9, then GV59-GV63 must equal 9.	64. Pre-Event Movement (Prior to Recognition of Critical Event)  (01) Going straight (02) Slowing or stopping in traffic lane (03) Starting in traffic lane (04) Stopped in traffic lane (05) Passing or overtaking another vehicle
(8) Fire truck or car (9) Unknown  ROLLOVER DATA  If GV07 (Body Type) ≠ 1-49, leave GV59-GV63 blank. If GV24 (Rollover) = 0, then GV59-GV63 must equal 0.	64. Pre-Event Movement (Prior to Recognition of Critical Event)  (01) Going straight (02) Slowing or stopping in traffic lane (03) Starting in traffic lane (04) Stopped in traffic lane
(8) Fire truck or car (9) Unknown  ROLLOVER DATA  If GV07 (Body Type) ≠ 1-49, leave GV59-GV63 blank. If GV24 (Rollover) = 0, then GV59-GV63 must equal 0. If GV24 = 9, then GV59-GV63 must equal 9.  59. Rollover Initiation Type (0) No rollover (1) Trip-over (2) Flip-over (3) Turn-over (4) Climb-over (5) Fall-over (6) Bounce-over (7) Collision with another vehicle (8) Other rollover initiation type specify):	64. Pre-Event Movement (Prior to Recognition of Critical Event)  (01) Going straight (02) Slowing or stopping in traffic lane (03) Starting in traffic lane (04) Stopped in traffic lane (05) Passing or overtaking another vehicle (06) Disabled or parked in travel lane (07) Leaving a parking position (08) Entering a parking position (09) Turning right (10) Turning left (11) Making a U-turn (12) Backing up (other than for parking position) (13) Negotiating a curve (14) Changing lanes (15) Merging (16) Successful avoidance maneuver to a previous critical event

### CODES FOR ROLLOVER INITIATION OBJECT CONTACTED

(00) No rollover	(57) Fence
(01-30) — Vehicle Number	(58) Wall
	(59) Building
Noncollision	(60) Ditch or culvert
(31) Turn-over — fall-over	(61) Ground
(33) Jackknife	(62) Fire hydrant
	(63) Curb
Collision With Fixed Object	(64) Bridge
(41) Tree (≤ 4 inches in diameter)	(68) Other fixed object (specify):
(42) Tree (> 4 inches in diameter)	• • • • • • • • • • • • • • • • • • • •
(43) Shrubbery or bush	(69) Unknown fixed object
(44) Embankment	
	Collision with Nonfixed Object
(45) Breakaway pole or post (any diameter)	(71) Motor vehicle not in-transport
	(76) Animal
Nonbreakaway Pole or Post	(77) Train
(50) Pole or post (≤ 4 inches in diameter)	(78) Trailer, disconnected in transport
(51) Pole or post (> 4 inches but ≤ 12 inches in diameter)	(88) Other nonfixed object (specify):
(52) Pole or post (> 12 inches in diameter)	(89) Unknown nonfixed object
(53) Pole or post (diameter unknown)	(ac, chance in normal object
	(98) Other event (specify):
(54) Concrete traffic barrier	(a a) a site a value (apacity).
(55) Impact attenuator	(99) Unknown event or object
(56) Other traffic barrier (includes guardrail) (specify):	,

#### PRECRASH DATA (Continued) 65. Critical Precrash Event Pedestrian or Pedalcyclist, or Other Nonmotorist (80) Pedestrian in roadway This Vehicle Loss of Control Due To: (81) Pedestrian approaching roadway (01) Blow out or flat tire (82) Pedestrian - unknown location (02) Stalled engine (83) Pedalcyclist or other nonmotorist in roadway (03) Disabling vehicle failure (e.g., wheel fell off) (specify): (specify): (84) Pedalcyclist or other nonmotorist approaching (04) Non-disabling vehicle problem (e.g., hood flew roadway (specify): up) (specify): (85) Pedalcyclist or other nonmotorist—unknown (05) Poor road conditions (puddle, pot hole, ice, etc.) location (specify): (specify): (06) Traveling too fast for conditions Object or Animal (08) Other cause of control loss (specify): (87) Animal in roadway (88) Animal approaching roadway (09) Unknown cause of control loss (89) Animal-unknown location (90) Object in roadway This Vehicle Traveling (91) Object approaching roadway (10) Over the lane line on left side of travel lane (92) Object—unknown location (11) Over the lane line on right side of travel lane (12) Off the edge of the road on the left side (98) Other critical precrash event (specify): (13) Off the edge of the road on the right side (14) End departure (99) Unknown (15) Turning left at intersection (16) Turning right at intersection (17) Crossing over (passing through) intersection (19) Unknown travel direction For Corrective Actions Attempted see variable GV14 (Attemped Avoidance Manuever) Other Motor Vehicle In Lane (50) Stopped (51) Traveling in same direction with lower speed 66. Precrash Stability After Avoidance Maneuver (i.e., lower steady speed or decelerating) (0) No avoidance maneuver (52) Traveling in same direction with higher speed (1) Tracking (53) Traveling in opposite direction (2) Skidding longitudinally—rotation less than 30 (54) In crossover degrees (55) Backing (3) Skidding laterally-clockwise rotation (59) Unknown travel direction of other motor vehicle in lane (4) Skidding laterally—counterclockwise rotation (7) Other vehicle loss-of-control (specify): Other Motor Vehicle Encroaching Into Lane (60) From adjacent lane (same direction) - over left (8) No driver present lane line (9) Precrash stability unknown (61) From adjacent lane (same direction) - over right lane line (62) From opposite direction—over left lane line 67. Precrash Directional Consequences of (63) From opposite direction—over right lane line Avoidance Maneuver (Corrective Action) (64) From parking lane (0) No avoidance maneuver (65) From crossing street, turning into same (1) Vehicle stayed in travel lane where avoidance direction maneuver was initiated (66) From crossing street, across path (2) Vehicle stayed on roadway but left travel lane (67) From crossing street, turning into opposite where avoidance maneuver was initiated direction (68) From crossing street, intended path not known (3) Vehicle stayed on roadway, not known if left (70) From driveway, turning into same direction travel lane where avoidance maneuver was (71) From driveway, across path initiated (72) From driveway, turning into opposite direction (4) Vehicle departed roadway (73) From driveway, intended path not known (5) Avoidance maneuver initiated off roadway (74) From entrance to limited access highway

\*\*\* IF THE CDS APPLICABLE VEHICLE WAS NOT INSPECTED (I.E., GV35=0), \*\*\* DO NOT COMPLETE THE EXTERIOR AND INTERIOR VEHICLE FORMS.

(78) Encroachment by other vehicle-details

unknown

\*\*\* IF GV07 DOES NOT EQUAL 01-49, DO NOT COMPLETE \*\*\* THE EXTERIOR VEHICLE, INTERIOR VEHICLE. OCCUPANT ASSESSMENT, AND OCCUPANT INJURY FORMS.

(8) No driver present

(9) Directional consequences unknown

#### **GENERAL VEHICLE LOG**

National Highway Traffic Safety Administration	ERAL V	EHIC	LE I	LOG	}	NATIO						G SYS	
TO BE COMPLETED BY TEAM		ТО	BE (	CON	IPLE	TEC	BY	TH	E Z	ONE	CE	NTE	R
1. PSU Number  2. Case Number—Stratum  3. Researcher Completing Form  4. Vehicle Number  5. Vehicle Disposition/Type (1) Towed, CDS applicable (2) Non-towed, CDS applicable (not AOPS) (3) Non-CDS applicable (4) Non-towed AOPS—CDS applicable  6. Reason Vehicle Inspection Not Completed (00) Non-CDS applicable vehicle (01) Complete inspection	NOT 04 01 1	(1 (2 (3 (4 11. Re a. b. c. d. e. f.	) No ) Ad ) Dro ) Ch ) Co sason Algo Coll Veh Size Imp CDO Traj	t presided opped angeo rrect (s) Pro orithm ision icle to c / stif roved c ector nage	ogram choi type ype finess PDO	Resuce / we F	ults Di	oppe:		•		_	_
<ul> <li>(O2) Partial inspection</li> <li>(O3) Vehicle cannot be located</li> <li>(O4) Vehicle destroyed</li> <li>(O5) Vehicle outside of study area</li> <li>(O6) Vehicle impounded</li> <li>(O7) Vehicle sold</li> <li>(O8) Hit and run vehicle</li> <li>(O9) Owner could not be located</li> </ul>	:	a (Blank) (1)	b Corr Incorr		d no re	e econs	f truction	g on	h	i	<b>!</b>		
(10) Owner refusal (11) Insurance company refusal (12) Attorney refusal or litigation (13) Repair or tow facility refusal (14) Stolen (15) Wrong name and address on PAR (16) Caseload / staff turnover (17) Other (specify):		3 14	4 4 15	5 5 16	TUS 6 17	OF \ 7 18	/ARI/ 8 19	9 20	10 21	11 22	12 23	-67 13 24	
7. Knowledge Of Highest Delta V Results  Known (01) CRASH-PC damage only (02) CRASH-PC damage and trajectory (03) OLDMISS	01	25	26	27	28	29	30	31	32	33	34	35	
Unknown (04) Rollover (05) Other non-horizontal force (06) Sideswipe type damage / severe override (07) Vehicle out of scope / pedestrian (08) Yielding object (09) Overlapping damage (10) Insufficient data (11) Other (specify):		36 47	37 48	38 49	39 50	51	52	53	43 54	55	45 56	57	
8. Presence Of Non-coded Reconstruction Program? (0) No (1) Yes		58	59	60	61	62	63	64	65	66	67		
9. Data Obtained for This Vehicle's Most Severe Impact (Regardless of Usage) (0) No data obtained (1) CDC data only (2) Trajectory data only (3) CDC and crush profile only (4) CDC and trajectory data only (5) CDC, crush profile, and trajectory data	3_	(1) (2) (3) (4) (7) (8)	nk) C Deriv Non- Corre Chan Incor MDE	orrectectectectectectectectectectectectecte	t ror ctable e erro no erro	r or verride	3						

IF THIS CDS VEHICLE WAS NOT INSPECTED OR IF THIS WAS NOT A CDS VEHICLE, DO NOT COMPLETE AN EXTERIOR OR INTERIOR VEHICLE LOG



U.S. Department of Transportation National Highway Traffic Safety

GENERAL VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

lice Reported Alcohol Presence No alcohol present Yes (alcohol present) Not reported No driver present Unknown  te: See variables 37 through 55 (Page 4) for information on Other I  cohol Test Result For Driver de actual value (decimal implied fore first digit—0.xx)  5) Test refused  6) None given 7) AC test performed, results unknown  8) No driver present  9) Unknown  urce:  ACCIDENT RELATED  eed Limit  10) No statutory limit de posted or statutory speed limit  10) Unknown  tempted Avoidance Maneuver	96
No driver present Unknown  te: See variables 37 through 55 (Page 4) for information on Other I  cohol Test Result For Driver de actual value (decimal implied fore first digit—0.xx)  5) Test refused  6) None given  7) AC test performed, results unknown  8) No driver present  9) Unknown  urce:  ACCIDENT RELATED  eed Limit  0) No statutory limit ode posted or statutory speed limit  9) Unknown	96
te: See variables 37 through 55 (Page 4) for information on Other II cohol Test Result For Driver de actual value (decimal implied fore first digit—0.xx) 5) Test refused 6) None given 7) AC test performed, results unknown 8) No driver present 9) Unknown urce:  ACCIDENT RELATED  eed Limit 0) No statutory limit ide posted or statutory speed limit 9) Unknown	96
(Page 4) for information on Other Incohol Test Result For Driver Ide actual value (decimal implied fore first digit—0.xx)  (5) Test refused  (6) None given  (7) AC test performed, results unknown  (8) No driver present  (9) Unknown  (1) Unknown  (2) CIDENT RELATED  (3) No statutory limit (4) Ide posted or statutory speed limit (9) Unknown	96
ACCIDENT RELATED  eed Limit 0) No statutory limit de posted or statutory speed limit 9) Unknown	55 99
eed Limit O) No statutory limit de posted or statutory speed limit O) Unknown	55 99
eed Limit O) No statutory limit de posted or statutory speed limit O) Unknown	55 99
tempted Avoidance Maneuver	99
0) No impact 1) No avoidance actions 2) Braking (no lockup)	
6) Steering left 7) Steering right 8) Braking and steering left 9) Braking and steering right 0) Accelerating	
2) Accelerating and steering right	
8) Other action (specify):	
oplicable codes may be found on the	51
O) No impact ode the number of the diagram that st describes the accident circumstance B) Other accident type (specify):	
	93) Braking (lockup) 94) Braking (lockup unknown) 95) Releasing brakes 96) Steering left 97) Steering right 98) Braking and steering left 99) Braking and steering right 10) Accelerating 11) Accelerating and steering left 12) Accelerating and steering right 13) No driver present 14) Other action (specify): 16) Unknown 17 18 19 10 10 11 11 12 13 14 15 16 16 17 18 18 18 18 18 18 18 18 18 18 18 18 18

OCCUPANT RELATED	24. Rollover
16. Driver Presence in Vehicle (0) Driver not present (1) Driver present (9) Unknown	(0) No rollover (no overturning)  Rollover (primarily about the longitudinal axis) (1) Rollover, 1 quarter turn only (2) Rollover, 2 quarter turns (3) Rollover, 3 quarter turns
17. Number of Occupants This Vehicle (00-96) Code actual number of occupants for this vehicle (97) 97 or more (99) Unknown	<ul> <li>(4) Rollover, 4 or more quarter turns (specify):  ———————————————————————————————————</li></ul>
18. Number of Occupant Forms Submitted <u>O</u> 2	OVERRIDE/UNDERRIDE (THIS VEHICLE)
VEHICLE WEIGHT ITEMS	
19. Vehicle Curb Weight	25. Front Override/Underride (this Vehicle)
100 pounds.	26. Rear Override/Underride (this Vehicle)
(010) Less than 1050 pounds (135) 13,500 pounds or more (999) Unknown	(0) No override/underride, or not an end-to-end impact
Source:	Override (see specific CDC) (1) 1st CDC
20. Vehicle Cargo WeightO 0 0	(2) 2nd CDC (3) Other not automated CDC (specify):
100 pounds. (00) Less than 50 pounds (97) 9,650 pounds or more (99) Unknown	Underride (see specific CDC) (4) 1st CDC (5) 2nd CDC
RECONSTRUCTION DATA	(6) Other not automated CDC (specify):
21. Towed Trailing Unit (0) No towed unit (1) Yes—towed trailing unit (9) Unknown	(7) Medium/heavy truck or bus override (9) Unknown
	HEADING ANGLE AT IMPACT FOR HIGHEST DELTA V
22. Documentation of Trajectory Data for This Vehicle (0) No (1) Yes	Values: (000)-(359) Code actual value (997) Noncollision (998) Impact with object (999) Unknown
23. Post Collision Condition of Tree or Pole (For Highest Delta V)	27. Heading Angle For This Vehicle 05
<ul> <li>(0) Not collision (for highest delta V) with tree or pole</li> <li>(1) Not damaged</li> <li>(2) Cracked/sheared</li> <li>(3) Tilted &lt;45 degrees</li> <li>(4) Tilted ≥45 degrees</li> <li>(5) Uprooted tree</li> <li>(6) Separated pole from base</li> <li>(7) Pole replaced</li> <li>(8) Other (specify):</li> </ul>	28. Heading Angle For Other Vehicle
(9) Unknown	

,	Secondary Highest
29. Basis for Total Delta V (highest)	32. Lateral Component of Delta V
Delta V Calculated  (1) CRASH program—damage only routine (2) CRASH program—damage and trajectory routine (3) Missing vehicle algorithm  Delta V Not Calculated (4) At least one vehicle (which may be this vehicle) is beyond the scope of an acceptable reconstruction program, regardless of collision conditions. (5) All vehicles within scope (CDC applicable) of CRASH program but one of the collision conditions is beyond the scope of the CRASH program or other acceptable reconstruction technique, regardless of adequacy of damage data. (6) All vehicle and collision conditions are within scope of one of the acceptable reconstruction programs, but there is insufficient data available.  COMPUTER GENERATED DELTA V  Secondary Highest  30. Total Delta V  Secondary Highest  (NOTE: 00 means less than 0.5 mph) (97) 96.5 mph and above (99) Unknown  31. Longitudinal Component of Delta V  Nearest mph  (NOTE: _00 means greater than -0.5 and less than +0.5 mph) (±97) ±96.5 mph and above (_99) Unknown	32. Lateral Component of Delta V  Nearest mph  (NOTE:00 means greater than0.5 and less than +0.5 mph) (±97) ±96.5 mph and above (99) Unknown  33. Energy Absorption Nearest 100 foot-lbs Nearest 100 foot-lbs Nearest 100 foot-lbs or more (9997) 999,650 foot-lbs or more (9999) Unknown  34. Confidence In Reconstruction Program Results (For Highest Delta V) (0) No reconstruction (1) Collision fits model — results appear reasonable (2) Collision fits model — results appear low (4) Borderline reconstruction — results appear reasonable  35. Type of Vehicle Inspection (0) No inspection (1) Complete inspection (2) Partial inspection (specify):
IS OLDMISS APPLICABLE FOR 1	• • • • •
IF YES: IS A COMPLETED OLDMISS PROGRA	AM SUMMARY INCLUDED? [ ] YES [ ] NO

37.	Police Reported Other Drug Presence (0) No other drugs present (1) Yes (other drug present)	10	DRUG EVALUATION CLASSIFICATION OTHER DRUGS TEST RESULTS FOR DRIVER
	<ul><li>(7) Not reported</li><li>(8) No driver present</li><li>(9) Unknown</li></ul>		DEC Observation/ Specimen Perception Test
38.	Police Reported Observation/Perception Test Type For Driver (0) No observation/perception test given (1) Drug recognition technician (DRT) determination using DEC process (2) Behavioral (3) Other physical observation/perception determination (specify):		Narcotic Drug 40. 41. 2 Depressant Drug 42. 43. Stimulant Drug 44. 45. Hallucinogen Drug 46. 47. Cannabinoid Drug 48. 49. Phencyclidine (PCP) 50. 51. Inhalant Drug 52. 53. Other Drug (Excluding 54. 55. Nicotine, Aspirin, Alcohol, Drugs Administered Post-Crash)
	(4) DEC process available, unknown if determination made	-	Codes For Observation/Perception Test Results
	<ul><li>(5) DEC process not available, unknown if other observation/perception test given</li><li>(7) Other observation/perception test</li></ul>		<ul><li>(0) No DEC observation/perception test given</li><li>(1) Passed DEC observation/perception test</li><li>(2) Failed DEC observation/perception test</li></ul>
	(specify):		(3) DEC observation/perception test given— results unknown
			<ul><li>(8) No driver present</li><li>(9) Unknown if DEC observation/perception test given</li></ul>
39.	Other Drug Specimen Test Type For Driver (0) No specimen test given	<u>10</u>	Codes for Specimen Test Results
	(1) Blood test (2) Urine test		(0) No specimen test given
	<ul><li>(3) Other specimen tests (specify):</li><li>(7) Unspecified specimen test</li></ul>	-	<ul><li>(1) Drug not found in specimen</li><li>(2) Drug found in specimen</li><li>(7) Specimen test given, results unknown or</li></ul>
	(8) No driver present		not obtained
	(9) Unknown if specimen test given		(8) No driver present (9) Unknown if specimen test given

OTHER DATA	61. Rollover Initiation Object Contacted
56. Driver's Zip Code	
(00000) Driver not present (00001) Driver not a resident of U.S. or territories Code actual 5-digit zip code (99999) Unknown	62. Location on Vehicle Where Initial Principal Tripping Force Is Applied  (0) No rollover (1) Wheels/tires (2) Side plane
57. Driver's Race/Ethnic Origin (0) Driver not present (1) White (non-Hispanic) (2) Black (non-Hispanic) (3) White (Hispanic) (4) Black (Hispanic) (5) American Indian, Eskimo or Aleut (6) Asian or Pacific Islander (8) Other (specify):	(3) End plane (4) Undercarriage (5) Other location on vehicle (specify):  (8) Non-contact rollover forces (specify):  (9) Unknown  63. Direction of Initial Roll  (0) No rollover (1) Roll right - primarily about the longitudinal axis
58. Vehicle Special Use (This Trip) (0) No special use (1) Taxi (2) Vehicle used as school bus (3) Vehicle used as other bus (4) Military (5) Police (6) Ambulance (7) Hearse (8) Fire truck or car (9) Unknown	(2) Roll left - primarily about the longitudinal axis (5) End-over-end (i.e., primarily about the lateral axis) (9) Unknown roll direction  PRECRASH DATA  64. Pre-Event Movement (Prior to Recognition of Critical Event)
ROLLOVER DATA	Recognition of Critical Event)
If GV07 (Body Type) ≠ 1-49, leave GV59-GV63 blank. If GV24 (Rollover) = 0, then GV59-GV63 must equal 0. If GV24 = 9, then GV59-GV63 must equal 9.	<ul> <li>(01) Going straight</li> <li>(02) Slowing or stopping in traffic lane</li> <li>(03) Starting in traffic lane</li> <li>(04) Stopped in traffic lane</li> <li>(05) Passing or overtaking another vehicle</li> </ul>
59. Rollover Initiation Type  (0) No rollover  (1) Trip-over (2) Flip-over (3) Turn-over (4) Climb-over (5) Fall-over (6) Bounce-over (7) Collision with another vehicle (8) Other rollover initiation type specify):  (9) Unknown rollover initiation type	(06) Disabled or parked in travel lane (07) Leaving a parking position (08) Entering a parking position (09) Turning right (10) Turning left (11) Making a U-turn (12) Backing up (other than for parking position) (13) Negotiating a curve (14) Changing lanes (15) Merging (16) Successful avoidance maneuver to a previous critical event (97) Other (specify):
60. Location of Rollover Initiation	(98) No driver present (99) Unknown
(O) No rollover	

#### PRECRASH DATA (Continued)

62

This Vehicle Loss of Control Due To:

- (01) Blow out or flat tire
- (02) Stalled engine
- (03) Disabling vehicle failure (e.g., wheel fell off) (specify):
- (O4) Non-disabling vehicle problem (e.g., hood flew up) (specify):
- (05) Poor road conditions (puddle, pot hole, ice, etc.) (specify):
- (06) Traveling too fast for conditions
- (08) Other cause of control loss (specify):
- (09) Unknown cause of control loss

#### This Vehicle Traveling

- (10) Over the lane line on left side of travel lane
- (11) Over the lane line on right side of travel lane
- (12) Off the edge of the road on the left side
- (13) Off the edge of the road on the right side
- (14) End departure
- (15) Turning left at intersection
- (16) Turning right at intersection
- (17) Crossing over (passing through) intersection
- (19) Unknown travel direction

#### Other Motor Vehicle In Lane

- (50) Stopped
- (51) Traveling in same direction with lower speed (i.e., lower steady speed or decelerating)
- (52) Traveling in same direction with higher speed
- (53) Traveling in opposite direction
- (54) In crossover
- (55) Backing
- (59) Unknown travel direction of other motor vehicle in lane

#### Other Motor Vehicle Encroaching Into Lane

- (60) From adjacent lane (same direction)—over left lane line
- (61) From adjacent lane (same direction)—over right lane line
- (62) From opposite direction—over left lane line
- (63) From opposite direction—over right lane line
- (64) From parking lane
- (65) From crossing street, turning into same direction
- (66) From crossing street, across path
- (67) From crossing street, turning into opposite direction
- (68) From crossing street, intended path not known
- (70) From driveway, turning into same direction
- (71) From driveway, across path
- (72) From driveway, turning into opposite direction
- (73) From driveway, intended path not known
- (74) From entrance to limited access highway
- (78) Encroachment by other vehicle—details unknown

Pedestrian or Pedalcyclist, or Other Nonmotorist

- (80) Pedestrian in roadway
- (81) Pedestrian approaching roadway
- (82) Pedestrian unknown location
- (83) Pedalcyclist or other nonmotorist in roadway (specify):
- (84) Pedalcyclist or other nonmotorist approaching roadway (specify):
- (85) Pedalcyclist or other nonmotorist—unknown location (specify):

#### Object or Animal

- (87) Animal in roadway
- (88) Animal approaching roadway
- (89) Animal—unknown location
- (90) Object in roadway
- (91) Object approaching roadway
- (92) Object—unknown location
- (98) Other critical precrash event (specify):
- (99) Unknown

For Corrective Actions Attempted see variable GV14 (Attemped Avoidance Manuever)

66. Precrash Stability After Avoidance Maneuver

9

- (0) No avoidance maneuver
- (1) Tracking
- (2) Skidding longitudinally—rotation less than 30 degrees
- (3) Skidding laterally—clockwise rotation
- (4) Skidding laterally—counterclockwise rotation
- (7) Other vehicle loss-of-control (specify):
- (8) No driver present
- (9) Precrash stability unknown

67. Precrash Directional Consequences of Avoidance Maneuver (Corrective Action)

9

- (0) No avoidance maneuver
- (1) Vehicle stayed in travel lane where avoidance maneuver was initiated
- (2) Vehicle stayed on roadway but left travel lane where avoidance maneuver was initiated
- (3) Vehicle stayed on roadway, not known if left travel lane where avoidance maneuver was initiated
- (4) Vehicle departed roadway
- (5) Avoidance maneuver initiated off roadway
- (8) No driver present
- (9) Directional consequences unknown

\*\*\* IF THE CDS APPLICABLE VEHICLE WAS NOT INSPECTED (I.E., GV35=0), \*\*\* DO NOT COMPLETE THE EXTERIOR AND INTERIOR VEHICLE FORMS.

\*\*\* IF GV07 DOES NOT EQUAL 01-49, DO NOT COMPLETE \*\*\*
THE EXTERIOR VEHICLE, INTERIOR VEHICLE,
OCCUPANT ASSESSMENT, AND OCCUPANT INJURY FORMS.

NATIONAL ACCIDENT SAMPLING SYSTEM

National Highway Traffic Safety **GENERAL VEHICLE LOG** Administration CRASHWORTHINESS DATA SYSTEM TO BE COMPLETED BY THE ZONE CENTER TO BE COMPLETED BY TEAM 1. PSU Number NCI 10. Reconstruction Program (Most Severe Impact) (O) Not present 92-04 2. Case Number - Stratum Added (2) Dropped (3) Changed 3. Researcher Completing Form (4) Correct 4. Vehicle Number 11. Reason(s) Program Results Dropped Or Changed a. Algorithm choice 5. Vehicle Disposition/Type b. Collision type (1) Towed, CDS applicable c. Vehicle type Non-towed, CDS applicable (not AOPS) d. Size / stiffness / weight (3) Non-CDS applicable Improved PDOF е. Non-towed AOPS-CDS applicable f. CDC Trajectory data g.  $\Omega_{-}$ 6. Reason Vehicle Inspection Not Completed Damage data (00) Non-CDS applicable vehicle Heading angle for Oldmiss Complete inspection (01) Partial inspection (02) (03) Vehicle cannot be located (04)Vehicle destroyed Vehicle outside of study area (05) (06) Vehicle impounded (Blank) Correct or no reconstruction (07)Vehicle sold (1) Incorrect (08) Hit and run vehicle (09) Owner could not be located (10) Owner refusal DATA STATUS OF VARIABLE NUMBERS 3-67 (11)Insurance company refusal (12)Attorney refusal or litigation 3 4 7 5 6 R 9 10 11 12 13 (13)Repair or tow facility refusal (14)Stolen Wrong name and address on PAR (15) (16)Caseload / staff turnover 14 15 16 17 18 19 20 21 22 23 24 (17) Other (specify): 01 7. Knowledge Of Highest Delta V Results 25 26 27 28 29 30 31 32 33 34 35 (01) CRASH-PC damage only (02) CRASH-PC damage and trajectory **OLDMISS** Unknown 36 37 39 40 42 38 41 43 44 45 46 (04) Rollover (05) Other non-horizontal force (06) Sideswipe type damage / severe override Vehicle out of scope / pedestrian (07)47 48 49 50 51 52 53 54 55 56 57 (80) Yielding object (09) Overlapping damage (10) Insufficient data (11) Other (specify): 58 59 60 61 62 63 64 65 67 66 8. Presence Of Non-coded Reconstruction Program?  $\Omega$ (O) No (1) Yes 9. Data Obtained for This Vehicle's Most Severe Data Status Codes: Impact (Regardless of Usage) (Blank) Correct (0) No data obtained (1) Derived error (1) CDC data only (2) Non-correctable error (2) Trajectory data only (3) Correctable error (3) CDC and crush profile only (4) Change-no error (4) CDC and trajectory data only (7) Incorrect edit override (5) CDC, crush profile, and trajectory data (8) MDE error (9) Unknown coded

> IF THIS CDS VEHICLE WAS NOT INSPECTED OR IF THIS WAS NOT A CDS VEHICLE. DO NOT COMPLETE AN EXTERIOR OR INTERIOR VEHICLE LOG



National Highway Traffic Safety

#### **EXTERIOR VEHICLE FORM**

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

Administration			CRASHWORTHINESS DATA SYSTE
1. Primary Sampling Unit Number	NC51	3. Vehicle Number	02
2. Case Number - Stratum	92.04		
	VEHICLE IDE	NTIFICATION	

VIN _	LGI	LT	53T	2			Model Year	92
Vehicle	Make (speci	fy):(	HEVE	OLET	Vehicle Mo	del (specify):	ORSICA	LT

#### **LOCATOR**

Locate the end of the damage with respect to the vehicle longitudinal center line or bumper corner for end impacts or an undamaged axle for side impacts.

Specific Impact No.	Location of Direct Damage	Location of Field L
l	STARTSO FILCHILL	ENTIRE FRONTAL PLANE
i y d <sub>asi</sub>	SIMBA FLOND	INKNOWN

#### **CRUSH PROFILE**

NOTES: Identify the plane at which the C-measurements are taken (e.g., at bumper, above bumper, at sill, above sill, etc.) and label adjustments (e.g., free space).

Measure and document on the vehicle diagram the location of maximum crush.

Measure C1 to C6 from driver to passenger side in front or rear impacts and rear to front in side impacts.

Free space value is defined as the distance between the baseline and the original body contour taken at the individual C locations. This may include the following: bumper lead, bumper taper, side protrusion, side taper, etc. Record the value for each C-measurement and maximum crush.

Use as many lines/columns as necessary to describe each damage profile.

Specific		Direct D	amage								
Specific Impact Number	Plane of Impact C-Measurements	Width (CDC)	Max Crush	Field L	C <sub>1</sub>	C₂	C₃	C₄	C₅	C <sub>e</sub>	±D
	BUMPER	45.0	Clo	ટાક	185	12.7	305	37.6	45.7	64.7	0
. 1	F.5.		`		5.	7.,	, (3)	(°()	7.	5.	
1	FLIAL				13.5	20.7	202	27.4	43.7	57.7	
								***		•	
2.	Parte Deve	6.5		UNK	MA	XED	84	IMI	RI	#1	
									·	,	
				EXT	END	2	22"	Don	ND	SIDE	
ļ											
<b></b>											

	VEHICLE DAMAGE SKETCH	
TIRE—WHEEL DAMAGE a. Rotation physically b. Tire restricted deflated  RF	ORIGINAL SPECIFICATIONS  Wheelbase Overall Length Maximum Width Curb Weight Average Track Front Overhang Rear Overhang Engine Size: cyl./displ. Undeformed End Width	WHEEL STEER ANGLES (For locked front wheels or displaced rear axles only)  RF
NOTES: Sketch new perimeter and cross hate	Original Bumper height  POST CRASH  POST CRASH  POST CRASH	
damage received on the back of this Annotate any damage caused by ext	page. rication such as component removal by torching, prying, or hydrau $47$	ilic shears.

iational A	ccident Sampling System-Crashworthiness Data	System: E	exterior Vehicle Form	Page
	CDC WOI	RKSHEE	T	
	CODES FOR OBJE	CT CONT	ACTED	
(01-30)	— Vehicle Number		Fence	
Noncol	lision		Wall Building	
	Overturn — rollover		Ditch or culvert	
	Fire or explosion		Ground	
	Jackknife		Fire hydrant	
	Other intraunit damage (specify):		Curb	
(54)	Other intradrit damage (specify).		Bridge	
(35)	Noncollision injury		Other fixed object (specify):	
	Other noncollision (specify):	(00)	other fixed object (specify).	
(00)	other floridomater (openity).	(69)	Unknown fixed object	
(39)	Noncollision — details unknown	(00)	Olkhown hada object	
(30)		Collisio	n with Nonfixed Object	
Collisio	n With Fixed Object		Motor vehicle not in-transport	
	Tree (≤ 4 inches in diameter)		Pedestrian	
	Tree (> 4 inches in diameter)		Cyclist or cycle	
	Shrubbery or bush		Other nonmotorist or conveyance	
	Embankment	,,,,		
,		(75)	Vehicle occupant	
(45)	Breakaway pole or post (any diameter)		Animal	
• • • • • • • • • • • • • • • • • • • •	and the second s	(77)	· · · · · · · · · · · · · · · · · · ·	
Nonbre	akaway Pole or Post		Trailer, disconnected in transport	
	Pole or post (≤ 4 inches in diameter)		Other nonfixed object (specify):	
	Pole or post (> 4 inches but ≤ 12 inches in	(00)	Care remined especification (	
	diameter)	(89)	Unknown nonfixed object	
(52)	Pole or post (> 12 inches in diameter)	,,,,,		
	Pole or post (diameter unknown)	(98)	Other event (specify):	
	Concrete traffic barrier	(99)	Unknown event or object	
	Impact attenuator		-	
(56)	Other traffic barrier (includes guardrail)			

### DEFORMATION CLASSIFICATION BY EVENT NUMBER

(specify):

Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force (degrees)	Incremental Value of Shift	(3) Deformation Location	(4) Specific Longitudinal or Lateral Location	(5) Specific Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
01	01	355	00	E	D	E	W	06
02	03	020	00	F	<u>L</u>	阜	E	03
					<del></del>			

#### **COLLISION DEFORMATION CLASSIFICATION**

HIGHEST DELTA "V"

Accident Event	
Sequence Number	Obje Contac

(7) Deformation Extent

Second Highest Delta "V"

#### **CRUSH PROFILE**

The crush profile for the damage described in the CDC(s) above should be documented in the appropriate space below. (ALL MEASUREMENTS ARE IN INCHES.)

HIGHEST DELTA "V"

Second Highest Delta "V"

03.4

- (O) No
- (1) Yes

- 27. Researcher's Assessment of Vehicle Disposition
  - (0) Not towed due to vehicle damage
  - (1) Towed due to vehicle damage
  - (9) Unknown

of an inch (9999) Unknown

	Is This A Multi-Stage Manufactured Vehicle And/Or A Certified Altered Vehicle? (0) No post manufacturer modifications (1) Yes - post manufacturer modifications (specify):  (Include photograph of CERTIFICATION PLACARD in case report) (9) Unknown if vehicle is modified  Fire Occurrence (0) No fire	<u>O</u>	31. Origin of Fire (0) No fire (1) Vehicle exterior (front, side, back, top) (2) Exhaust system (3) Fuel tank (and other fuel retention system parts) (4) Engine compartment (5) Cargo/trunk compartment (6) Instrument panel (7) Passenger compartment area (8) Other location (specify):
	Yes, fire occurred (1) Minor (2) Major (9) Unknown		32. Type of Fuel Tank (0) No fuel tank (electrical vehicle) (1) Metallic (2) Non-metallic (9) Unknown
**			AS NOT TOWED AND WAS NOT AN AOPS *** T COMPLETE THE INTERIOR VEHICLE FORM.



National Highway Traffic Safety

EXTERIOR VEHICLE LOG NATIONAL ACCIDENT SAMPLING SYSTEM

dminetration	CRASHWORTHINESS DATA SYSTEM
TO BE COMPLETED BY TEAM	13. Number of Coded CDCs (0,1,2)
1. PSU Number <u>NC3T</u>	14. Number of Coded Crush Profiles (0,1,2)
2. Case Number—Stratum 92-04	
3. Researcher Completing Form	
4. Vehicle Number	DATA STATUS OF VARIABLE NUMBERS 4-32
5. Date Vehicle Inspected	
TO BE COMPLETED BY ZONE CENTER	Highest CDC 4 5 6 7 8 9 10 11
	1
6. Assessment of Complexity of Inspection (1) Level 1 - No measurements required (e.g., vehicle repaired or measurements not obtainable)	Secondary CDC
Level 2	
(2) Routine (3) Difficult	12 13 14 15 16 17 18 19
7. Applicable Precrash Measurements	
(0) Not applicable (1) Substandard (2) Standard (3) Above standard	Highest Crush Profile
(3) Above standard	20 21 22
8. Impact Damage Documentation (0) Not applicable (1) Substandard (2) Standard	
(3) Above standard	Secondary Crush Profile
9. Quality Of Vehicle Damage Sketch (0) Not applicable (e.g., repaired vehicle) (1) Substandard (2) Standard (3) Above standard	23 24 25
10. Exterior Slides Subject Quality	
(0) Not applicable	26 27 28 29 30 31 32
(1) Substandard (2) Standard	
(3) Above standard	
11. Exterior Slides Quality (0) Not applicable (1) Substandard (2) Standard (3) Above standard	Data Status Codes: (Blank) Correct
12. Primary Error Source (Vehicle Plane)	(1) Derived error
(O) No error	(2) Non-correctable error
(1) Front (2) Side (left or right)	(3) Correctable error (4) Change—no error
(3) Back (rear)	(5) Sequencing error
(4) Top	(7) Incorrect edit override (8) MDE error
(5) Undercarriage (8) Other (specify):	(9) Unknown coded
IF THIS VEHICLE WAS NOT TOWED (I.	E., GV09 ≠ 1), DO NOT COMPLETE THE

INTERIOR VEHICLE LOG

NATIONAL ACCIDENT SAMPLING SYSTEM CRASHWORTHINESS DATA SYSTEM

_	ъ.	0 11	11-14	Al contract
Ι.	Primary	Sampling	Unit	Number

2. Case Number - Stratum

3. Vehicle Number

#### INTEGRITY

4. Passenger Compartment Integrity (00) No integrity loss

Yes, integrity Was Lost Through

- (01) Windshield
- (02) Door (side)
- (03) Door/hatch (back door)
- (04) Roof
- (05) Roof glass
- (OB) Side window
- (07) Rear window (backlight)
- (08) Roof and roof glass
- (09) Windshield and door (side)
- (10) Windshield and roof
- (11) Side and rear window (side window and backlight)
- (12) Windshield and side window
- (13) Door and side window
- (98) Other combination of above (specify):
- (99) Unknown

Door, Tailgate or Hatch Opening

5. LF 3 6. RF 3 7. LR 1 8. RR 9 9. TG/H

- (O) No door/gate/hatch
- (1) Door/gate/hatch remained closed and operational
- (2) Door/gate/hatch came open during collision
- (3) Door/gate/hatch jammed shut
- (8) Other (specify):
- (9) Unknown

Damage/Failure Associated with Door, Tailgate or Hatch Opening in Collision. If IV05-IV09  $\neq$  2, Then code Ø

10. LF () 11. RF () 12. LR () 13. RR () 14. TG/H ()

(0) No door/gate/hatch or door not opened

Door, Tailgate or Hatch Came Open During Collision

- (1) Door operational (no damage)
- (2) Latch/striker failure due to damage
- (3) Hinge failure due to damage
- (4) Door structure failure due to damage
- (5) Door support (i.e., pillar, sill, roof side rail, etc.) failure due to damage
- (6) Latch/striker and hinge failure due to damage
- (8) Other failure (specify):
- (9) Unknown

**GLAZING** 

Glazing Damage from Impact Forces

15. WS 3 16. LF 6 17. RF 6 18. LR 019. RR

20. BL 021. Roof 22. Other 0

- (O) No glazing damage from impact forces?
- (2) Glazing in place and cracked from impact forces
- (3) Glazing in place and holed from impact forces
- (4) Glazing out-of-place (cracked or not) and not holed from impact forces
- (5) Glazing out-of-place and holed from impact forces
- (6) Glazing disintegrated from impact forces
- (7) Glazing removed prior to accident
- (8) No glazing
- (9) Unknown if damaged

Glazing Damage from Occupant Contact

23. WS / 24. LF / 25. RF 26. LR / 27. RR

28. BL (29. Roof (20. Other (2)

- (0) No occupant contact to glazing or no glazing
- (1) Glazing contacted by occupant but no glazing damage
- (2) Glazing in place and cracked by occupant contact
- (3) Glazing in place and holed by occupant contact
- (4) Glazing out-of-place (cracked or not) by occupant contact and not holed by occupant contact
- (5) Glazing out-of-place by occupant contact and holed by occupant contact
- (6) Glazing disintegrated by occupant contact
- (9) Unknown if contacted by occupant 3/4

If No Glazing Damage And No Occupant Contact or No Glazing, Then Code IV31 Through IV46 As Ø

Type of Window/Windshield Glazing

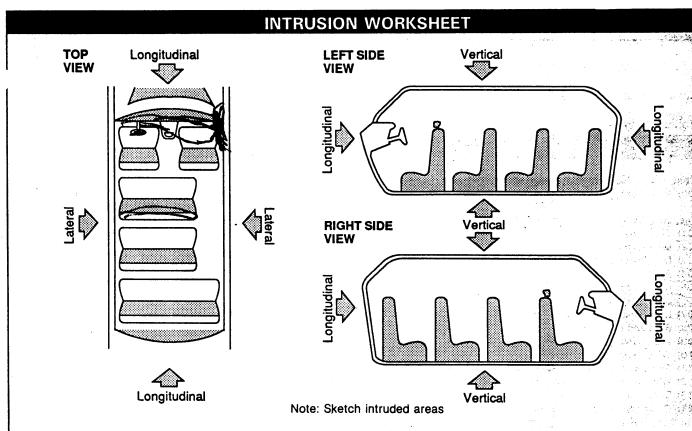
- 31. WS 32. LF 2 33. RF 2 34. LR 35. RR
- 36. BL 37. Roof 38. Other
  - (O) No glazing contact and no damage, or no glazing
  - (1) AS-1 Laminated
  - (2) AS-2 Tempered
  - (3) AS-3 Tempered-tinted
  - (4) AS-14 Glass/Plastic
  - (8) Other (specify):
  - (9) Unknown

Window Precrash Glazing Status

39. WS | 40. LF 241. RF 2 42. LR ()43. RR ()

44. BL 7/45. Roof 7/46. Other 6

- (0) No glazing contact and no damage, or no glazing
- (1) Fixed
- (2) Closed
- (3) Partially opened
- (4) Fully opened
- (9) Unknown



LOCATION OF INTRUSION	INTRUDED COMPONENT	COMPARISON VALUE	-	INTRUDED VALUE	· =	INTRUSION	DOMINANT CRUSH DIRECTION
1 3	R-DASH	64.5	_	42.5	=	22. 2	Long
13	C-DASH	60.	_	48.0	=	12.5	Long
	L-DACH	60 -	-	52.25	· · · =	7.75 8	Long
13	A. Pium Louan	61.0		34,5	=	26.5 1	LOUS.
13	TOE PAN	22.5		05	=	22. 3	LONG
13	WS KEADER	50.	_	39.0	=	11.	LONG
13	WINDSHIELD	61.0		46.25	=.	14.75 4	لمهر
[]	STRUM	54.	_	51.0	=	3,0	LONG"
12	W5	63.0		55.5	-	75 9	Long
12	Ws Herosch	54.0		50.25		3.75.	رەيد
22	ST MACI	0	_	7.2	=	10	, Usasa
21		0		60	<b>=</b>	16. / 3	10 23
23	iv h	6	_	55	=	5.5	
	MEAN	20.5	_	14.75	=	-5,75	ll. §
13	310E PM	26.0	_	16.0		10.	LAT

### OCCUPANT AREA INTRUSION

Note: If no intrusions, leave variables IV47-IV86 blank.							
		Location of Intrusion	Intruding Component	Magnitude of Intrusion	Dominant Crush Direction		
	1st	47. 1 3	48. <u>O</u>	49. <u>/</u>	50. <u>Z</u>		
	2nd	51. 1 3	52. <u>O</u> 4	53. <u>5</u>	54.2		
	3rd	55. 1 3	56. <u>0</u> 5	57.5	58. 2		
	4th	59. 13	60	<u>1</u> 61. <u>4</u>	62		
	5th	63. \ 3	64. 03	<u>8</u> 65. <u>4</u>	66. <u>2</u>		
	6th	67. 1 3	68.15	_ 69. <u>3</u>	70. <u>2</u>		
	7th	71. 13	72. 27	_ 73. <u>_3</u>	74.3		
	8th	75	76. <u>0</u> 2	<u>.</u> 77. <u>3</u>	78. <u>2</u>		
	9th	79. 12	80. 1 4	- 81. <u>3</u>	82. <u>2</u>		
	10th	83. 22	84. <u>20</u>	_ 85. <u>3</u>	86. 2		

### LOCATION OF INTRUSION

Third Seat

(31) Left

(32) Middle

(33) Right

DEATION OF INTINO	51014
Front Seat	Fourth Seat
(11) Left	(41) Left
(12) Middle	(42) Middle
(13) Right	(43) Right
Second Seat	(97) Catastrophic
(21) Left	(98) Other enclosed
(22) Middle	area (specify)
(23) Right	
	(99) Unknown

### INTRUDING COMPONENT

nterior	Components	_
(01)	Steering assembl	$\mathcal{Q}$
((02)	Instrument panel	left)
(103)	Instrument panel	cente
74 M. C.		

(04) Instrument panel right

(05) Toe pan (106) A-pillar

(07) B-pillar (08) C-pillar

(09) D-pillar

(10) Door panel (side) (12) Roof (or convertible top)

(13) Roof side rail (14) Windshield

(15) Windshield header

(16) Window frame

(17) Floor pan (includes sill)

(18) Backlight header (19) Front seat back

(20) Second sear back (21) Third seat back

(22) Fourth seat back

(23) Fifth seat back (24) Seat cushion

(25) Back door/panel (e.g., tailgate)

(26) Other interior component (specify):

(127) Side panel - forward of the A-pillar (28) Side panel - rear of the A-pillar

### Exterior Components

(30) Hood

(31) Outside surface of this vehicle (specify):

(32) Other exterior object in the environment (specify):

(33) Unknown exterior object

(97) Catastrophic

(98) Intrusion of unlisted component(s) (specify):

(99) Unknown

### **MAGNITUDE OF INTRUSION**

(1)  $\geq$  1 inch but < 3 inches

 $(2) \ge 3$  inches but < 6 inches

(3)  $\geq$  6 inches but < 12 inches

 $(4) \ge 12$  inches but < 18 inches

(5) ≥ 18 inches but < 24 inches (6) ≥ 24 inches

(7) Catastrophic

(9) Unknown

### DOMINANT CRUSH DIRECTION

(1) Vertical

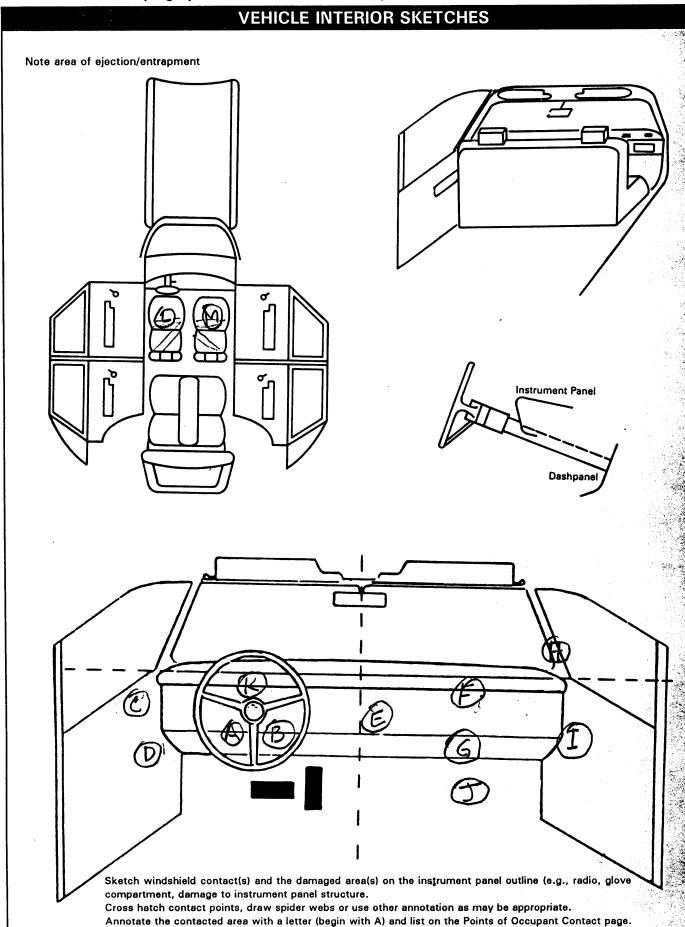
(2) Longitudinal

(3) Lateral

(7) Catastrophic

(9) Unknown

#### STEERING COLUMN 92. Steering Rim/Spoke Deformation Code actual measured 87. Steering Column Type deformation to the nearest inch. (1) Fixed column (0) No steering rim deformation (2) Tilt column (1-5) Actual measured value (3) Telescoping column (6) 6 inches or more (4) Tilt and telescoping column (8) Observed deformation cannot be measured (8) Other column type (specify): (9) Unknown (9) Unknown 93. Location of Steering Rim/Spoke Deformation (00) No steering rim deformation Quarter Sections 88. Blank <u>X</u> <u>X</u> (01) Section A (02) Section B (03) Section C (This variable is left blank so that numbering consistency (04) Section D can be maintained with the 1988-91 CDS. Half Sections (05) Upper half of rim/spoke (06) Lower half of rim/spoke (07) Left half of rim/spoke 89. Blank XXX Lower (08) Right half of rim/spoke (This variable is left blank so that numbering consistency (09) Complete steering wheel collapse can be maintained with the (10) Undetermined location 1988-91 CDS. (99) Unknown **INSTRUMENT PANEL** 004,000 90. Blank 94. Odometer Reading X X X(This variable is left blank 45.5 miles—Code mileage to the so that numbering consistency nearest 1,000 miles can be maintained with the (000) No odometer 1988-91 CDS. (001) Less than 1,500 miles (300) 299,500 miles or more (999) Unknown 91. Blank X X XSource: (This variable is left blank so that numbering consistency can be maintained with the 95. Instrument Panel Damage from 1988-91 CDS. Occupant Contact? (0) No (1) Yes (9) Unknown 96. Knee Bolsters Deformed from **Occupant Contact?** (0) No (1) Yes (8) Not present (9) Unknown 97. Did Glove Compartment Door Open During Collision(s)? (0) No (1) Yes (8) Not present (9) Unknown



POINTS OF OCCUPANT CONTACT						
Contact	Interior Component Contacted	Occupant No. If Known	Body Region If Known	Supporting Physical Evidence	Confidence Level of Contact Point	
Α	09	01	K	CLOTH TRANSFERS		
В	09	01	K	ts to		
С	20	01	V	DENT	[ ]	
D	20	Oi	U	TRANSFOR	[2]	
E	10	02	U	HAIR/SMUKES		
F	11	Ø2	C	INTRADED - TRANSFORS	変した。	
G	12	02	U	BLOOD-DENTED		
Н	37	102	U	TRANSFORM DENTS		
1	31	02	U	CLOTH TP ANSFERS		
J	5(	07	U	INTRUDED	1000年	
K /	45	01	F	LIPSTICIL - BLOOD	134	
L	41	01	Ù	CUT FOR EXTERATION	1 4 4	
М	41	12	U	11 11 11	i Sing	
N						
					7107.10	

### CODES FOR INTERIOR COMPONENTS

#### **FRONT**

- (01) Windshield
- (O2) Mirror
- (03) Sunvisor
- (04) Steering wheel rim
- (05) Steering wheel hub/spoke
- (06) Steering wheel (combination of codes 04 and 05)
- (07) Steering column, transmission selector lever, other attachment
- (08) Add on equipment (e.g., CB, tape deck, air conditioner)
- (09) Left instrument panel and below
- (10) Center instrument panel and below:
- (11) Right instrument panel and below
- (12) Glove compartment door
- (13) Knee bolster
- (14) Windshield including one or more of the following: front header, Apillar, instrument panel, mirror, or steering assembly (driver side only)
- (15) Windshield including one or more of the following: front header, Apillar, instrument panel, or mirror (passenger side only)
- (16) Other front object (specify):

### LEFT SIDE

- (20) Left side interior surface, excluding hardware or armrests
- (21) Left side hardware or armrest
- (22) Left A pillar
- (23) Left B pillar
- (24) Other left pillar (specify):
- (25) Left side window glass or frame

- (26) Left side window glass including one or more of the following: frame, window sill, A pillar, B pillar, or roof side rail.
- (27) Other left side object (specify):
- (28) Left side window sill

#### RIGHT SIDE

- (30) Right side interior surface, excluding hardware or armrests
- (31) Right side hardware or armrest
- (32) Right A pillar
- (33) Right B pillar
- (34) Other right pillar (specify):
- (35) Right side window glass or frame
- (36) Right side window glass including one or more of the following: frame, window sill, A pillar, B pillar, or roof side rail.
- (37) Other right side object (specify):
- (38) Right side window sill

### INTERIOR

- (40) Seat, back support
- (41) Belt restraint webbing/buckle
- (42) Belt restraint B-pillar attachment point
- (43) Other restraint system component (specify):
- (44) Head restraint system
- (45) Air bag
- (46) Other occupants (specify):
- (47) Interior loose objects

- (48) Child safety seat (specify)
- (49) Other interior object (specify)

#### ROOF

- (50) Front header
- (51) Rear header
- (52) Roof left side rail
- (53) Roof right side rail
- (54) Roof or convertible top

### **FLOOR**

- (56) Floor (including toe pan)
- (57) Floor or console mounted transmission lever, including console
- (58) Parking brake handle
- (59) Foot controls including parking brake

#### REAR

- (60) Backlight (rear window)
- (61) Backlight storage rack, door, etc
- (62) Other rear object (specify):

# CONFIDENCE LEVEL OF CONTACT POINT

and the

- (1) Certain
- (2) Probable
- (3) Possible
- (9) Unknown

### **AUTOMATIC RESTRAINTS**

NOTES: Encode the data for each applicable front seat position. The attribute for the variables may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

	Assessment Form.	AIR BAGS	
F		Left	Right
1	Availability/Function	l	Q 300
R S	Deployment		Q .
Т	Failure		0
(0) I (1) A Non-(2) A (3) A	System Availability/Function Not equipped/not available Air bag  functional Air bag disconnected (specify):  Air bag not reinstalled Unknown	Air Bag System Deployment  (0) Not equipped/not available  (1) Air bag deployed during accident  (as a result of impact)  (2) Air bag deployed inadvertently just prior to accident  (3) Air bag deployed, accident sequence undetermined  (4) Nondeployed  (5) Unknown if deployed  (6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)  (9) Unknown	Oid Air Bag System Fail?  (O) Not equipped/not available  (1) No  (2) Yes (specify):  (9) Unknown
	<u> </u>	AUTOMATIC BELTS  Left	Right
	Availability/Function	Lent	3,00
F	Use		
Î R	Туре		
S T	Proper Use		
T	Failure Modes		
Availat (0) (1) (2) (3) (4) (9) Autom (0) (1)	atic (Passive) Belt System bility/Function Not equipped/not available 2 point automatic belts 3 point automatic belts Automatic belts - type unknown  -functional Automatic belts destroyed or rendered inoperative Unknown  atic (Passive) Belt System Use Not equipped/not available/destroyed or rendered inoperative Automatic belt in use	Proper Use of Automatic (Passive) Belt System  (0) Not equipped/not available/not used (1) Automatic belt used properly (2) Automatic belt used properly with child safety seat  Automatic Belt Used Improperly (3) Automatic shoulder belt worn under arm (4) Automatic shoulder belt worn behind back (5) Automatic belt worn around more than one person (6) Lap portion of automatic belt worn on abdomen	Automatic (Passive) Belt Failure Modes During Accident (0) Not equipped/not available/not in u (1) No automatic belt failure(s) (2) Torn webbing (stretched webbing included) (3) Broken buckle or latchplate (4) Upper anchorage separated (5) Other anchorage separated (specification) (6) Broken retractor (7) Combination of above (specify): (8) Other automatic belt failure (specification)
(3)	Automatic belt not in use (manually disconnected, motorized track inoperative) Automatic belt use unknown Unknown	(7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify):	

# (specify):\_\_\_\_\_\_(9) Unknown

system

Automatic (Passive) Belt System Type

(O) Not equipped/not available

(1) Non-motorized system(2) Motorized system(9) Unknown

(8) Other improper use of automatic belt

### MANUAL RESTRAINTS

NOTES: Encode the applicable data for each seat position in the vehicle. The attribute for the variable may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Ocupant Assessment Form.

If a Child safety seat is present, encode the data on the back of this page.

If the vehicle has automatic restraints available, encode the appropriate data on the back of the previous page.

		Left	Center	Right
F R	Availability	-4	0	4
	Use	04	ŎO:	Model
S T	Failure Modes		<b>O</b>	
S	Availability	4	3	1
SECOZO	Use	00	00	00
N D	Failure Modes	0	0	0
T H	Availability			
<u> </u>	Use			
R D	Failure Modes			
Q	Availability		,	
Ĥ	Use		2.5	
E R	Failure Modes			

### Manual (Active) Belt System Availability

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available type unknown

### Integral Belt Partially Destroyed

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)
- (8) Other belt (specify):
- (9) Unknown

### Manual (Active) Belt System Use

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperable (specify):
- (02) Shoulder belt
- (03) Lap belt
- (04) Lap and shoulder belt
- (05) Belt used type unknown

- (08) Other belt used (specify):
- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat type unknown
- (18) Other belt used with child safety seat (specify):
- (99) Unknown if belt used

### Manual (Active) Belt Failure Modes During Accident

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify):
- (6) Broken retractor
- (7) Combination of above (specify):
- (8) Other manual belt failure (specify):
- (9) Unknown

### HEAD RESTRAINTS/SEAT EVALUATION

NOTES: Encode the applicable data for each seat position in the vehicle. The attribute for these variables may be found at the bottom of the page. Head restraint type/damage and seat type/performance should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

		Left	Center	Right
F I	Head Restraint Type/Damage	3	Ø	3 (NOR)
	Seat Type	01	00	01 ८ थे।
RS	Seat Performance		p	4 5
1	Seat Orientation		0	
S	Head Restraint Type/Damage	0	0	0 -
E C	Seat Type	03	03	63
0 N	Seat Performance	6	6	6
D	Seat Orientation		1	
Т	Head Restraint Type/Damage	•		
Ĥ	Seat Type			
Ŕ	Seat Performance			
D	Seat Orientation			
0	Head Restraint Type/Damage			
Ť	Seat Type			
H E	Seat Performance			
R	Seat Orientation			

### Head Restraint Type/Damage by Occupant at This Occupant Position

- No head restraints
- (1)
- Integral no damage Integral damaged during accident
- (3)
- Adjustable no damage Adjustable damaged during accident (4)
- (5) Add-on - no damage
- Add-on damaged during accident
- (8) Other Specify):
- Unknown

#### Seat Type (this Occupant Position)

- (00) No seat
- (01)Bucket
- (02)Bucket with folding back
- (03)Bench
- (04)Bench with separate back cushions
- (05)Bench with folding back(s)
- (06)Split bench with separate back cushions
- (07)Split bench with folding back(s)
- (80)Pedestal (i.e., column supported)
- (09)Other seat type (specify):
- Box mounted seat (i.e., van type)
- (99) Unknown

### Seat Performance (this Occupant Position)

- (0) No seat
- No seat performance failure(s) (1)
- Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed specify:
- Seat tracks/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion (specify):
- (7) Combination of above (specify):
- (8) Other (specify):
- (9) Unknown

### Seat Orientation (this Occupant Position)

- No seat
- Forward facing seat (1)
- Rear facing seat
- (3) Side facing seat (inward)
- (4) Side facing seat (outward)
- (8) Other (specify):
- (9) Unknown

### DESCRIBE ANY INDICATION OF ABNORMAL OCCUPANT POSTURE (I.E., UNUSUAL OCCUPANT CONTACT PATTERN)

Complete the following if the research in the vehicle. Code the appropriate					ected from or entrappe	
EJECTION No [✔] Yes [ ] Describe indications of ejection and I	body parts in	volved in p	artial ejection	(s):		
				ndra aran dalam Mariabili aran da		
Occupant Number						
Ejection						
(Note on Vehicle Interior Sketch) Ejection Area						
Ejection Medium						
Medium Status						
Ejection (1) Complete ejection (1) Partial ejection (3) Ejection, Unknown degree (9) Unknown	(7) Roof (8) Other area (e.g., back of pickup, etc.) (specify): (9) Unknown  Ejection Medium			(5) Integral structure (8) Other medium (specify): (9) Unknown  Medium Status (Immediately Pto Impact)		
(1) Windshield (1) Door/l (2) Left front (2) Nonfiz (3) Right front (3) Fixed (4) Left rear (4) Nonfiz (5) Right rear				(1) Oper (2) Close (3) Integ (9) Unkn	ed []  ral structure	

## **INTERIOR VEHICLE LOG**

	TO BE COMPLETED BY TEAM		D/	ATA	STA	TUS	OF V	ARI	ABLE	NUI	MBEF	RS 4	-97
1.	PSU Number	NCSI	Integri	ty									
2.	Case Number—Stratum <u>G 7</u>	NCSI OI	4	5	6	7	8	9	10	11	12	13	14
3.	Researcher Completing Form												
4.	Vehicle Number	02	Glazin	9									
			15	16	17	18	19	20	21	22	23	24	25
	TO BE COMPLETED BY ZONE CEN	NTER											
5.	Assessment of Complexity of Interior Vehicle Inspection		26	27	28	29	30	31	32	33	34	35	36
	(1) Level 1 - Interior inaccessible or repaired												
	Level 2 (2) Routine		27			40	44	40	40	44	45	40	
	(3) Difficult		37	38	39	40	41	42	43	44	45	46	3.
•	December 1991					<u> </u>					<u> </u>		
6.	Documentation Of Integrity	-	 										
7.	Documentation Of Glazing		Intrusi 47	on 48	49	50	51	52	53	54	55	56	57
		-										¥.4.	
8.	Documentation of Intrusions			L					<u> </u>	·	<u>L</u>	<u>.                                    </u>	
•	Decumentation of Casacian Column (Minut		58	59	60	61	62	63	64	65	66	67	68
9.	Documentation of Steering Column/Wheel									<u> </u>			
10.	Documentation of Occupant Contacts	·	69	70	71	72	73	74	75	76	77	78	79
										3.			
11.	Documentation of Restraint Systems		80	01	00	00	0.4	٥.					
12.	Documentation of Seats		80	81	82	83	84	85	86	1			*
			L	<u> </u>					<u> </u>	]			1872
13.	Interior Slides Subject Quality		04	0	• •				_				e e
			Steerii 87	ng Co 88	iumn/ 89	vvnee 90		instru ∙92		100	) 95	96	97
14.	Interior Slides Quality			ХX	ХX	ХX			1 1 1	0.47		2 h 9 h	
	Codes For Log Variables 6-14			L		L			<u> </u>	L	1	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	
	(0) Not applicable (1) Substandard												
	(2) Standard		Data										į.
	(3) Above Standard		(1)	ank) ( Deriv	ved e	rror							
15.	Number of Coded Intrusions		(3)	Corre	ectab	ctable le err	or	r					
			(5)	Sequ	iencir	no er ng err	or						
			(7) (8)	Inco: MDE	rrect erro	edit o	verri	de					7.10
						code	d						W.



National Highway Traffic Safety Administration

### **INTERVIEW FORM**

1. Primary Sampling Unit Number NCらて	Interviewee(s) Role or Name(s): FIZI FND OF							
2. Case Number - Stratum 9204	Interviewee(s) Role or Name(s): FRIEND OF  DRIVER & RF OCCUPANT							
3. Vehicle Number	,							
Review the Interview Cue Sheet prior to conducting interview(s) to ensure the acquisition of all pertinent data.								
GENERAL DESCRIE	GENERAL DESCRIPTION OF ACCIDENT SEQUENCE							
NOT TURE OF NO	DENT DETAUS -							
SPE	CIFIC QUESTIONS							
, , , , , , , , , , , , , , , , , , ,								
Key to Researcher: Have you obtained the following	g through the interviewee(s) description and specific questions?							
[ ] PRE-CRASH, AT IMPACT [ ] Specific vehicle travel/driver intention impact [ ] Post [ ] Avoidance maneuvers [ ] Documents	eed estimate (precrash/at  [ ] Previous vehicle damage pact)  [ ] Glazing type  [ ] Vehicle glazing status  or status (precrash/postcrash) [ ] PRR clarifications al rest position [ ] Glove box status							
Cargo? No [ ] Yes [ /] Interviewee's Estimated Cargo Weight								
Description of Cargo ∠ 2065AG €								
Present Location of Vehicle (if not yet inspected)?:								

National Accident Sampling System-Crashworthiness Data System: Interview Form

### **OCCUPANT DATA**

Enter the occupant's seat position in the first row and complete the column below it using the information from the interviewee(s).

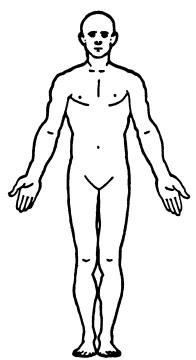
SEAT POSITION	DRIVER	RF		
RACE ? HISPANIC? [/] No [] Yes	WHITE	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	**************************************	KXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
AGE/SEX	52/F	73/M1		
HEIGHT (IN)	52	6-		
WEIGHT (LBS.)	130	200		
POSTURE	UNIC	UNIC		
EJECTED? [ ] No [ ] Yes	UNK	UNIC		
DESCRIBE THE EJECTION PATH				
ENTRAPPED? [ ] No [ ] Yes	UNIC	VNIC		
DESCRIBE ENTRAPMENT				
DESCRIBE TYPE OF RESTRAINT	UNIC	UNK		
WERE BELTS WORN? [ ] No [ ] Yes	UNK	UNK		
HOW WHERE THE BELTS WORN?				
DESCRIBE ANY RESTRAINT FAILURES	UNK	UNK		
TYPE OF TREATMENT	UNIK HOSP.	ф		
NAME OF TREATMENT FACILITY	UNIC UNK UNK UNK			
DAYS IN HOSPITAL?	()NK			
NO. OF LOST WORK DAYS?	UNK			
FOLLOW-UP TREATMENT	UNK			
WOULD YOU SIGN A MEDICAL RELEASE?		64		

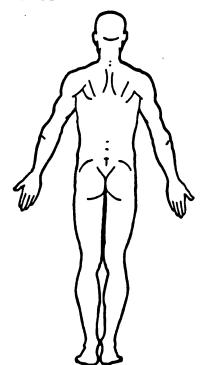
PSU Number NCGT Case Number-Stratum 9209 Vehicle Number 02 Occupant Number 01

### **INJURY DATA FROM INTERVIEWEE(S)**

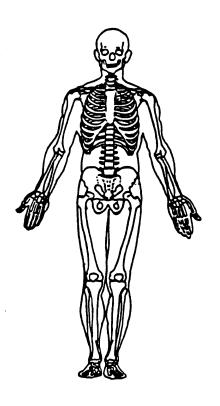
Indicate the Location, Lesion, Detail, and Source of all injuries. Specify interviewee(s): FREND

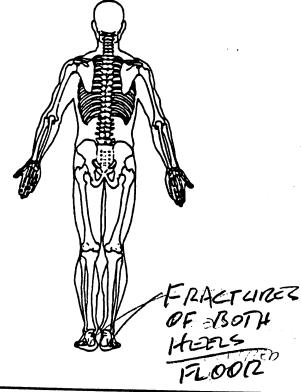
### SOFT TISSUE/INTERNAL INJURIES





### SKELETAL INJURIES





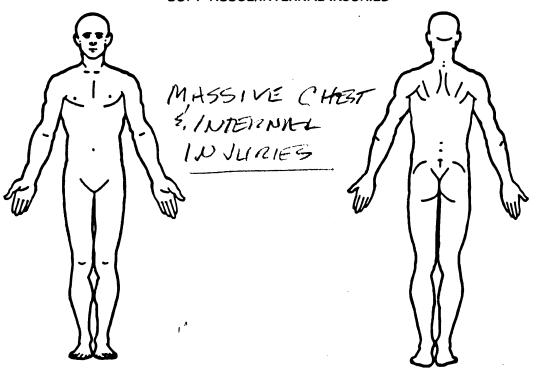
The space provided on the back of this page may be used to document injuries noted by the interviewee(s).

PSU Number NCGT Case Number-Stratum 9204 Vehicle Number 02 Occupant Number 01

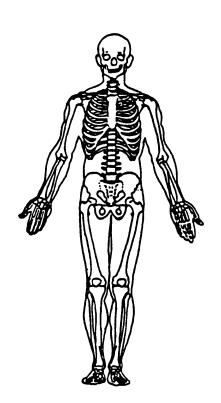
### **INJURY DATA FROM INTERVIEWEE(S)**

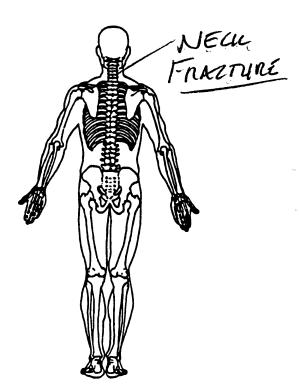
Indicate the Location, Lesion, Detail, and Source of all injuries. Specify interviewee(s): FRIEND

SOFT TISSUE/INTERNAL INJURIES



SKELETAL INJURIES





The space provided on the back of this page may be used to document injuries noted by the interviewee(s).



U.S. Department of Transportation

### **OCCUPANT ASSESSMENT FORM**

Form Approved O.M.B. No. 2127-0021

National Highway Traffic Safety Administration

1. Primary Sampling Unit Number  2. Case Number - Stratum  3. Vehicle Number  4. Occupant Number  OCCUPANT'S CHARACTERISTICS  5. Occupant's Age Code actual age at time of accident. (00) Less than one year old (specify by month):  (97) 97 years and older (99) Unknown	11. Occupant Posture (0) Normal posture (1) Abnormal posture (specify): (9) Unknown  EJECTION/ENTRAPMENT  12. Ejection (0) No ejection (1) Complete ejection (2) Partial ejection (3) Ejection, unknown degree (9) Unknown
6. Occupant's Sex (1) Male (2) Female (9) Unknown  7. Occupant's Height Code actual height to the nearest inch. (99) Unknown  8. Occupant's Weight Code actual weight to the nearest pounds. (999) Unknown	13. Ejection Area (0) No ejection (1) Windshield (2) Left front (3) Right front (4) Left rear (5) Right rear (6) Rear (7) Roof (8) Other area (e.g., back of pickup, etc.) (specify): (9) Unknown
9. Occupant's Role (1) Driver (2) Passenger (9) Unknown  10. Occupant's Seat Position Front Seat (11) Left side (12) Middle (13) Right side (14) Other (specify): (15) On or in the lap of another occupant  Second Seat (21) Left side (22) Middle (23) Right side (24) Other (specify): (25) On or in the lap of another occupant  Third Seat (31) Left side (32) Middle (33) Right side	14. Ejection Medium (0) No ejection (1) Door/hatch/tailgate (2) Nonfixed roof structure (3) Fixed glazing (4) Nonfixed glazing (specify): (5) Integral structure (8) Other medium (specify): (9) Unknown  15. Medium Status (Immediately Prior To Impact) (0) No ejection (1) Open (2) Closed (3) Integral structure (9) Unknown  16. Entrapment (NOTE: Entrapped means that part of the
(34) Other (specify): (35) On or in the lap of another occupant  Fourth Seat (41) Left side (42) Middle (43) Right side (44) Other (specify): (45) On or in the lap of another occupant (97) In or on unenclosed area (98) Other seat (specify): (99) Unknown	person was in the vehicle and mechanically restrained; jammed doors and immobilizing injuries by themselves are not sufficient to constitute entrapment.)  (0) Not entrapped  (1) Entrapped  (9) Unknown

RESTRAINT	SYSTEM AND SEAT EVALUATION	21.	Air	Bag System Availability/Function	1
(0) None a (1) Belt rei (2) Should (3) Lap be	moved/destroyed er belt It		(0) (1) <i>Nor</i>	Not equipped/not available Air bag  n-functional Air bag disconnected (specify):	
(5) Belt av	d shoulder belt ailable—type unknown * Partially Destroyed			Air bag not reinstalled Unknown	
(6) Should (7) Lap be	er belt (lap belt destroyed/removed) It (shoulder belt destroyed/removed)	22.		Bag System Deployment	1
(8) Other I	belt (specify):			Not equipped/not available Air bag deployed during accident (as a result of impact)	
	~ 1			Air bag deployed inadvertently just prior to accident	
(00) None ( remov	tive) Belt System Use used, not available, or belt ed/destroyed ative (specify):		(4)	Air bag deployed, accident sequence undetermined Nondeployed Unknown if deployed	
(02) Should (03) Lap be	der belt			Air bag deployed as a result of a noncolliside event during accident sequence (e.g., fire, explosion, electrical)	on
(05) Belt us	nd shoulder belt sed—type unknown belt used (specify):		(9)	Unknown	
(13) Lap be (14) Lap ar	der belt used with child safety seat elt used with child safety seat nd shoulder belt used with child	23.	(0) (1)	Air Bag System Fail? Not equipped/not available No	
safety (15) Belt u: (18) Other (speci	sed with child safety seat—type unknown belt used with child safety seat			Yes (specify): Unknown	e.
	own if belt used				
(0) None u (1) Belt us		24		te: See Variables 44 through 48 (Page 5) for Information on Automatic Belts	5
Belt Used II	ed properly with child safety seat  mproperly	24.	(O)	ice Reported Restraint Use  None used  Police did not indicate restraint use	
(4) Should	er belt worn under arm er belt worn behind back or seat orn around more than one person		(3)	Shoulder belt Lap belt	
(6) Lap bel (7) Lap bel	lt worn on abdomen It or lap and shoulder belt used		(5)	Lap and shoulder belt Belt used, type not specified	i i i i i i i i i i i i i i i i i i i
	erly with child safety seat (specify):			Child safety seat Other or automatic restraint (specify):	- 1
(specif	•			Restrained, type unknown Police indicated "unknown"	
(9) Unknow	wn				
During Acc (0) No mai	nual belt used	25		ad Restraint Type/Damage by Occupant This Occupant Position	3_
(2) Torn w include	nual belt failure(s) rebbing (stretched webbing not ed) buckle or latchplate		(O) (1)	No head restraints Integral—no damage Integral—damaged during accident	
(4) Upper	anchorage separated anchorage separated (specify):		(3) (4)	Adjustable—no damage Adjustable—damaged during accident Add-on—no damage	
í	nation of above (specify):		(6)	Add-on—no damage Add-on—damaged during accident Other (specify):	
1	manual belt failure (specify):		(9)	Unknown	
(9) Unkno	wn	1		•	475

26.	Seat Type (this Occupant Position)  (00) Occupant not seated or no seat  (01) Bucket  (02) Bucket with folding back  (03) Bench  (04) Bench with separate back cushions  (05) Bench with folding back(s)  (06) Split bench with separate back cushions  (07) Split bench with folding back(s)  (08) Pedestal (i.e., column supported)  (09) Other seat type (specify):  (10) Box mounted seat (i.e., van type)  (99) Unknown	30. Child Safety Seat Orientation (00) No child safety seat  Designed for Rear Facing for This Age/Weight (01) Rear facing (02) Forward facing (08) Other orientation (specify):  (09) Unknown orientation  Designed For Forward Facing for This Age/Weight (11) Rear facing (12) Forward facing (18) Other orientation (specify):
27.	Seat Performance (this Occupant Position)  (0) Occupant not seated or no seat  (1) No seat performance failure(s)  (2) Seat adjusters failed  (3) Seat back folding locks or "seat back" failed  (4) Seat track/anchors failed  (5) Deformed by impact of occupant  (6) Deformed by passenger compartment intrusion (specify):  (7) Combination of above (specify):  (8) Other (specify):	(19) Unknown orientation  Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight (21) Rear facing (22) Forward facing (28) Other orientation (specify): (29) Unknown orientation (99) Unknown if child safety seat used  31. Child Safety Seat Harness Usage 32. Child Safety Seat Shield Usage
	(a) Girciowii	33. Child Safety Seat Tether Usage Note: Options below applicable to
	CHILD SAFETY SEAT	Variables OA31-OA33. (00) No child safety seat
28.	Child Safety Seat Make/Model (000) No child safety seat Applicable codes are found in your NASS CDS Data Collection, Coding and Editing (950) Built-in child safety seat (997) Other make/model (specify):  (998) Unknown make/model (999) Unknown if child safety seat used	Not Designed With Harness/Shield/Tether (01) After market harness/shield/tether added, not used (02) After market harness/shield/tether used (03) Child safety seat used, but no after market harness/shield/tether added (09) Unknown if harness/shield/tether added or used
29.	Type of Child Safety Seat  (0) No child safety seat  (1) Infant seat  (2) Toddler seat  (3) Convertible seat  (4) Booster seat  (7) Other type child safety seat (specify):  (8) Unknown child safety seat type  (9) Unknown if child safety seat used	Designed With Harness/Shield/Tether (11) Harness/shield/tether not used (12) Harness/shield/tether used (19) Unknown if harness/shield/tether used  Unknown If Designed With Harness/Shield/Tether (21) Harness/shield/tether not used (22) Harness/shield/tether used (29) Unknown if harness/shield/tether used (99) Unknown if child safety seat used

INJURY CONSEQUENCES	38. Working Days Lost
34. Injury Severity (Police Rating)  (0) O - No injury (1) C - Possible injury (2) B - Nonincapacitating injury (3) A - Incapacitating injury (4) K - Killed (5) U - Injury, severity unknown (6) Died prior to accident (9) Unknown	Code the number of days (up through 60) that the occupant lost from work due to the accident (00) No working days lost (61) 61 days or more (62) Fatally injured (97) Not working prior to accident (99) Unknown
35. Treatment - Mortality (0) No treatment (1) Fatal (2) Fatal - ruled disease  Nonfatal (3) Hospitalization (4) Transported and released (5) Treatment at scene - nontransported (6) Treatment later (8) Treatment - other (specify):	39. Time to Death Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, n days = 30 + n up through 30 days = 60) (00) Not fatal (96) Fatal - ruled disease (99) Unknown  40. 1st Medically Reported Cause of Death  41. 2nd Medically Reported Cause of Death 60
36. Type Of Medical Facility (for Initial Treatment) 2 (0) Not treated at a medical facility (1) Trauma center (2) Hospital (3) Medical clinic (4) Physician's office (5) Treatment later at medical facility (8) Other (specify):  (9) Unknown	42. 3rd Medically Reported Cause of Death  Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death  (00) Not fatal or no additional causes  (97) Other result (specify):  (99) Unknown
37. Hospital Stay (00) Not Hospitalized Code the number of days (up through 60) that the occupant stayed in hospital. (61) 61 days or more (99) Unknown	This Occupant  Code the actual number of injuries recorded for this occupant.  (00) No recorded injuries  (97) Injured, details unknown  (99) Unknown if injured

	AUTOMATIC BELT SYSTEM	48. Automatic (Passive) Belt Failure Modes
44.	Automatic (Passive) Belt System Availability/ Function (0) Not equipped/not available (1) 2 point automatic belts (2) 3 point automatic belts (3) Automatic belts - type unknown	During Accident
	Non-functional (4) Automatic belts destroyed or rendered inoperative (9) Unknown	(6) Broken retractor (7) Combination of above (specify): (8) Other automatic belt failure (specify): (9) Unknown
45.	Automatic (Passive) Belt System Use (0) Not equipped/not available/destroyed or rendered inoperative (1) Automatic belt in use (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify):  (3) Automatic belt use unknown (9) Unknown	49. Seat Orientation (this Occupant Position) (0) Occupant not seated or no seat (1) Forward facing seat (2) Rear facing seat (3) Side facing seat (inward) (4) Side facing seat (outward) (8) Other (specify): (9) Unknown
46.	Automatic (Passive) Belt System Type	2
47.	(0) Not equipped/not available (1) Non-motorized system (2) Motorized system (9) Unknown  Proper Use of Automatic (Passive	TRAUMA DATA  50. Glasgow Coma Scale (GCS) Score (at Medical Facility) (00) Not injured (01) Injured - not treated at medical facility (02) No GCS Score at medical facility (03-15) Code Score actual value of the
	Belt System (0) Not equipped/not available/not used (1) Automatic belt used properly (2) Automatic belt used properly with child safety seat	initial GCS Score recorded at medical facility.  (97) Injured, details unknown (99) Unknown if injured
	<ul> <li>Automatic Belt Used Improperly</li> <li>(3) Automatic shoulder belt worn under arm</li> <li>(4) Automatic shoulder belt worn behind back</li> <li>(5) Automatic belt worn around more than one person</li> <li>(6) Lap portion of automatic belt worn on abdomen</li> </ul>	51. Was the Occupant Given Blood? (1) No - blood not given (2) Yes - blood given (specify units): (9) Unknown if blood given
	<ul> <li>(7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify):</li> <li>(8) Other improper use of automatic belt system (specify):</li> <li>(9) Unknown</li> </ul>	52. Arterial Blood Gases (ABG) – HCO <sub>3</sub> (00) Not injured (01) Injured, ABGs not measured or reported (02-50) Code the actual value of the HCO <sub>3</sub> (96) ABGs reported, HCO <sub>3</sub> unknown (97) Injured, details unknown (99) Unknown if injured
	UPDATE CANDIDATE OCCUPANT INJURY FORM INCLUDED WIT	
_		
1	*** STO IF THERE ARE NO	OP HERE *** ) RECORDED INJURIES



# **OCCUPANT ASSESSMENT LOG**

National Highway Traffic Safety Administration

	TO BE COMPLETED BY TEAM	13. Injury Information Form Record	
		Official Received Status	•
1.	PSU Number NCST	a. Autopsy (invasive examination)	_
_	Case Number - Stratum 9704	b. Post-ER medical record which	-
2.	Case Number - Stratum	based on non-invasive examination	
3.	Researcher Completing Form	c. Admission record/summary of	_
	Vehicle Number (O 2	admission/discharge face sheet	
4.	Vehicle Number	d. Discharge summary  e. Operative report	_
5	Occupant Number	f. Radiographic record(s) post ER visit	<b>-</b> ,
٥.		g. History and physical examination	_
6.	Interviewer Number	and/or consultation records	
_	District Committee	h. Emergency room records	_
7.	Date Interview Completed/	i. Radiographic record(s) associated	_
8.	Occupant's Role	j. Private physician	
	(1) Driver	Unofficial	
	(2) Passenger	k. Lay coroner	
	(3) Unknown	I. EMS record	_
	<b>n</b>	m. Interviewee	_
9.	Interviewee For This Occupant 2	n. Other source (specify): B o. Police report	
	(O) No interview	5. Tollog report	- 1
	(1) Same person	(See reverse side of this page for codes for variable 13)	
	Surrogate		
	(2) Other occupant	14. Medical Facility Code	_ *
	(3) Relative or friend (4) Multiple interviewees from above categories	. 4	
	(4) Multiple interviewees from above categories (specify):	TO BE COMPLETED BY ZONE CENTER	
		15. Documentation of Occupant Interview (Excludes	
	1	Injury Data)	
10.	Manner Of Interview (0) No attempt	(0) Not applicable	
	(1) Telephone	(1) Substandard	
	(2) In-person	(2) Standard	
	(3) Questionnaire	(3) Above Standard	
,	(9) Unknown (for Zone Center use only)	DATA STATUS OF VARIABLE NUMBERS 4-52	
11.	Result Of Last Interview Attempt	4 5 6 7 8 9 10 11 12 13 14	
	(O1) Unable to contact or locate		٠,
	(02) Hit and run (03) Fatal—surrogate not available		
	(O3) Fatal—surrogate not available (O4) In intensive care—surrogate not available	15 16 17 18 19 20 21 22 23 24 25	
	(05) Out-of-state resident		
	(05) Out-of-state resident (06) Refused interview		
	(05) Out-of-state resident (06) Refused interview (07) Insurance company refusal	26 27 28 29 30 31 32 33 34 35 36	
	(05) Out-of-state resident (06) Refused interview (07) Insurance company refusal (08) Attorney refusal or litigation	26 27 28 29 30 31 32 33 34 35 36	
	(05) Out-of-state resident (06) Refused interview (07) Insurance company refusal	26 27 28 29 30 31 32 33 34 35 36	
	(05) Out-of-state resident (06) Refused interview (07) Insurance company refusel (08) Attorney refusal or litigation (09) No return of questionnaire (10) Other (specify): (11) Return of completed questionnaire		
	(05) Out-of-state resident (06) Refused interview (07) Insurance company refusal (08) Attorney refusal or litigation (09) No return of questionnaire (10) Other (specify): (11) Return of completed questionnaire (12) Partial interview	26     27     28     29     30     31     32     33     34     35     36       37     38     39     40     41     42     43     44     45     46     47	
	(05) Out-of-state resident (06) Refused interview (07) Insurance company refusel (08) Attorney refusal or litigation (09) No return of questionnaire (10) Other (specify): (11) Return of completed questionnaire		
	(05) Out-of-state resident (06) Refused interview (07) Insurance company refusal (08) Attorney refusal or litigation (09) No return of questionnaire (10) Other (specify): (11) Return of completed questionnaire (12) Partial interview	37 38 39 40 41 42 43 44 45 46 47	
12	(05) Out-of-state resident (06) Refused interview (07) Insurance company refusal (08) Attorney refusal or litigation (09) No return of questionnaire (10) Other (specify): (11) Return of completed questionnaire (12) Partial interview (13) Complete interview  Injury Treatment Status		
12	(05) Out-of-state resident (06) Refused interview (07) Insurance company refusal (08) Attorney refusal or litigation (09) No return of questionnaire (10) Other (specify): (11) Return of completed questionnaire (12) Partial interview (13) Complete interview  Injury Treatment Status (0) No treatment	37 38 39 40 41 42 43 44 45 46 47	
12	(05) Out-of-state resident (06) Refused interview (07) Insurance company refusal (08) Attorney refusal or litigation (09) No return of questionnaire (10) Other (specify): (11) Return of completed questionnaire (12) Partial interview (13) Complete interview  Injury Treatment Status (0) No treatment (1) Fatal—died before hospitalization	37 38 39 40 41 42 43 44 45 46 47	
12	(05) Out-of-state resident (06) Refused interview (07) Insurance company refusal (08) Attorney refusal or litigation (09) No return of questionnaire (10) Other (specify): (11) Return of completed questionnaire (12) Partial interview (13) Complete interview  Injury Treatment Status (0) No treatment	37 38 39 40 41 42 43 44 45 46 47  48 49 50 51 52	
12	(05) Out-of-state resident (06) Refused interview (07) Insurance company refusal (08) Attorney refusal or litigation (09) No return of questionnaire (10) Other (specify): (11) Return of completed questionnaire (12) Partial interview (13) Complete interview  Injury Treatment Status (0) No treatment (1) Fatal—died before hospitalization (2) Fatal—died after hospitalization	37 38 39 40 41 42 43 44 45 46 47	
12	(05) Out-of-state resident (06) Refused interview (07) Insurance company refusal (08) Attorney refusal or litigation (09) No return of questionnaire (10) Other (specify): (11) Return of completed questionnaire (12) Partial interview (13) Complete interview  1 Injury Treatment Status (0) No treatment (1) Fatal—died before hospitalization (2) Fatal—died after hospitalization (3) Hospitalization (4) Emergency room treatment only (5) Treatment at physician's office	37 38 39 40 41 42 43 44 45 46 47  48 49 50 51 52  Data Status Codes:	
12	(05) Out-of-state resident (06) Refused interview (07) Insurance company refusal (08) Attorney refusal or litigation (09) No return of questionnaire (10) Other (specify): (11) Return of completed questionnaire (12) Partial interview (13) Complete interview (14) Fatal—died before hospitalization (2) Fatal—died after hospitalization (3) Hospitalization (4) Emergency room treatment only (5) Treatment at physician's office (6) Treatment at scene or self treatment	37 38 39 40 41 42 43 44 45 46 47  48 49 50 51 52  Data Status Codes:  (Blank) Correct (5) Sequencing error	
12	(05) Out-of-state resident (06) Refused interview (07) Insurance company refusal (08) Attorney refusal or litigation (09) No return of questionnaire (10) Other (specify): (11) Return of completed questionnaire (12) Partial interview (13) Complete interview  Injury Treatment Status (0) No treatment (1) Fatal—died before hospitalization (2) Fatal—died after hospitalization (3) Hospitalization (4) Emergency room treatment only (5) Treatment at physician's office (6) Treatment at scene or self treatment (7) Outpatient surgery	37 38 39 40 41 42 43 44 45 46 47  48 49 50 51 52  Data Status Codes:	
12	(05) Out-of-state resident (06) Refused interview (07) Insurance company refusal (08) Attorney refusal or litigation (09) No return of questionnaire (10) Other (specify): (11) Return of completed questionnaire (12) Partial interview (13) Complete interview (14) Fatal—died before hospitalization (2) Fatal—died after hospitalization (3) Hospitalization (4) Emergency room treatment only (5) Treatment at physician's office (6) Treatment at scene or self treatment	37 38 39 40 41 42 43 44 45 46 47  48 49 50 51 52  Data Status Codes:  (Blank) Correct (1) Derived error  (5) Sequencing error (7) Incorrect edit override	
12	(05) Out-of-state resident (06) Refused interview (07) Insurance company refusal (08) Attorney refusal or litigation (09) No return of questionnaire (10) Other (specify): (11) Return of completed questionnaire (12) Partial interview (13) Complete interview (14) Complete interview (15) Fatal—died before hospitalization (16) Fatal—died after hospitalization (17) Fatal—died after hospitalization (18) Emergency room treatment only (19) Treatment at physician's office (19) Treatment at scene or self treatment (19) Outpatient surgery (19) Transported—unknown level of treatment	37 38 39 40 41 42 43 44 45 46 47  48 49 50 51 52  Data Status Codes:  (Blank) Correct (5) Sequencing error (7) Incorrect edit override (2) Non-correctable error (8) MDE error	



U.S. Department of Transportation

### **OCCUPANT ASSESSMENT FORM**

Form Approved
O.M.B. No. 2127-0021

National Highway Traffic Safety

O.M.B. No. 2127-0021

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number  2. Case Number - Stratum  3. Vehicle Number  4. Occupant Number  OCCUPANT'S CHARACTERISTICS  5. Occupant's Age Code actual age at time of accident. (00) Less than one year old (specify by month): (97) 97 years and older	11. Occupant Posture (0) Normal posture (1) Abnormal posture (specify): (9) Unknown  EJECTION/ENTRAPMENT  12. Ejection (0) No ejection (1) Complete ejection (2) Partial ejection (3) Ejection, unknown degree (9) Unknown
(99) Unknown  6. Occupant's Sex (1) Male (2) Female (9) Unknown  7. Occupant's Height Code actual height to the nearest inch. (99) Unknown  8. Occupant's Weight Code actual weight to the nearest pounds. (999) Unknown	13. Ejection Area (0) No ejection (1) Windshield (2) Left front (3) Right front (4) Left rear (5) Right rear (6) Rear (7) Roof (8) Other area (e.g., back of pickup, etc.) (specify): (9) Unknown
9. Occupant's Role (1) Driver (2) Passenger (9) Unknown  10. Occupant's Seat Position Front Seat (11) Left side (12) Middle (13) Right side (14) Other (specify): (15) On or in the lap of another occupant  Second Seat (21) Left side (22) Middle (23) Right side (24) Other (specify): (25) On or in the lap of another occupant	14. Ejection Medium (0) No ejection (1) Door/hatch/tailgate (2) Nonfixed roof structure (3) Fixed glazing (4) Nonfixed glazing (specify): (5) Integral structure (8) Other medium (specify): (9) Unknown  15. Medium Status (Immediately Prior To Impact) (0) No ejection (1) Open (2) Closed (3) Integral structure
(25) On or in the lap of another occupant  Third Seat (31) Left side (32) Middle (33) Right side (34) Other (specify): (35) On or in the lap of another occupant  Fourth Seat (41) Left side (42) Middle (43) Right side (44) Other (specify): (45) On or in the lap of another occupant  (97) In or on unenclosed area (98) Other seat (specify): (99) Unknown	(9) Unknown  16. Entrapment (NOTE: Entrapped means that part of the person was in the vehicle and mechanically restrained; jammed doors and immobilizing injuries by themselves are not sufficient to constitute entrapment.) (0) Not entrapped (1) Entrapped (9) Unknown

RE	STRAINT SYSTEM AND SEAT EVALUATION	21. Air Bag System Availability/Function	0
	Manual (Active) Belt System Availability (0) None available	(0) Not equipped/not available (1) Air bag	<del></del>
	(1) Belt removed/destroyed (2) Shoulder belt (3) Lap belt	Non-functional (2) Air bag disconnected (specify):	
	(4) Lap and shoulder belt (5) Belt available—type unknown	(3) Air bag not reinstalled (9) Unknown	
	Integral Belt Partially Destroyed  (6) Shoulder belt (lap belt destroyed/removed)  (7) Lap belt (shoulder belt destroyed/removed)	22. Air Bag System Deployment	0
	(8) Other belt (specify):	<ul><li>(0) Not equipped/not available</li><li>(1) Air bag deployed during accident (as a</li></ul>	
	(9) Unknown	result of impact) (2) Air bag deployed inadvertently just prior to accident	
18.	Manual (Active) Belt System Use (00) None used, not available, or belt removed/destroyed	<ul> <li>(3) Air bag deployed, accident sequence undetermined</li> <li>(4) Nondeployed</li> </ul>	
	(01) Inoperative (specify): (02) Shoulder belt	<ul> <li>(5) Unknown if deployed</li> <li>(6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire,</li> </ul>	n
	(03) Lap belt (04) Lap and shoulder belt (05) Belt used—type unknown (08) Other belt used (specify):	explosion, electrical) (9) Unknown	
	<ul> <li>(12) Shoulder belt used with child safety seat</li> <li>(13) Lap belt used with child safety seat</li> <li>(14) Lap and shoulder belt used with child safety seat</li> </ul>	23. Did Air Bag System Fail? (0) Not equipped/not available (1) No (2) Yes (specify):	0
	<ul> <li>(15) Belt used with child safety seat—type unknown</li> <li>(18) Other belt used with child safety seat (specify):</li> <li>(99) Unknown if belt used</li> </ul>	(9) Unknown	
19.	Proper Use of Manual (Active) Belts (0) None used or not available (1) Belt used properly	Note: See Variables 44 through 48 (Page 5) for Information on Automatic Belts	·
	(2) Belt used properly with child safety seat	24. Police Reported Restraint Use (0) None used	5
	<ul><li>Belt Used Improperly</li><li>(3) Shoulder belt worn under arm</li><li>(4) Shoulder belt worn behind back or seat</li></ul>	(1) Police did not indicate restraint use (2) Shoulder belt (3) Lap belt	
	(5) Belt worn around more than one person (6) Lap belt worn on abdomen	(4) Lap and shoulder belt	
	(7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify):	<ul><li>(5) Belt used, type not specified</li><li>(6) Child safety seat</li><li>(7) Other or automatic restraint (specify):</li></ul>	
	(8) Other improper use of manual belt system (specify):	(8) Restrained, type unknown (9) Police indicated "unknown"	
	(9) Unknown	·	
20.	Manual (Active) Belt Failure Modes During Accident (0) No manual belt used (1) No manual belt failure(s)	25. Head Restraint Type/Damage by Occupant at This Occupant Position (0) No head restraints	3
	<ul><li>(2) Torn webbing (stretched webbing not included)</li><li>(3) Broken buckle or latchplate</li></ul>	(1) Integral—no damage (2) Integral—damaged during accident	
	<ul><li>(4) Upper anchorage separated</li><li>(5) Other anchorage separated (specify):</li></ul>	(3) Adjustable—no damage (4) Adjustable—damaged during accident (5) Add-on—no damage	
1	(6) Broken retractor (7) Combination of above (specify):	(6) Add-on—damaged during accident (8) Other (specify):	
	(8) Other manual belt failure (specify):	(9) Unknown	
	(9) Unknown		

26.	Seat Type (this Occupant Position) (00) Occupant not seated or no seat (01) Bucket (02) Bucket with folding back (03) Bench (04) Bench with separate back cushions (05) Bench with folding back(s) (06) Split bench with separate back cushions (07) Split bench with folding back(s) (08) Pedestal (i.e., column supported) (09) Other seat type (specify):	30. Child Safety Seat Orientation (00) No child safety seat  Designed for Rear Facing for This Age/Weight (01) Rear facing (02) Forward facing (08) Other orientation (specify):  (09) Unknown orientation  Designed For Forward Facing for This Age/Weight (11) Rear facing
	(10) Box mounted seat (i.e., van type) (99) Unknown	(12) Forward facing (18) Other orientation (specify):
27.	Seat Performance (this Occupant Position)  (0) Occupant not seated or no seat (1) No seat performance failure(s) (2) Seat adjusters failed (3) Seat back folding locks or "seat back" failed (4) Seat track/anchors failed (5) Deformed by impact of occupant (6) Deformed by passenger compartment intrusion (specify):  (7) Combination of above (specify):  (8) Other (specify): (9) Unknown	(19) Unknown orientation  Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight (21) Rear facing (22) Forward facing (28) Other orientation (specify):  (29) Unknown orientation (99) Unknown if child safety seat used  31. Child Safety Seat Harness Usage 32. Child Safety Seat Shield Usage 33. Child Safety Seat Tether Usage Note: Options below applicable to Variables OA31-OA33. (00) No child safety seat
28.	Child Safety Seat Make/Model (000) No child safety seat Applicable codes are found in your NASS CDS Data Collection, Coding and Editing (950) Built-in child safety seat (997) Other make/model (specify):  (998) Unknown make/model (999) Unknown if child safety seat used	Not Designed With Harness/Shield/Tether (01) After market harness/shield/tether added, not used (02) After market harness/shield/tether used (03) Child safety seat used, but no after market harness/shield/tether added (09) Unknown if harness/shield/tether added or used  Designed With Harness/Shield/Tether
29.	Type of Child Safety Seat  (0) No child safety seat  (1) Infant seat  (2) Toddler seat  (3) Convertible seat  (4) Booster seat  (7) Other type child safety seat (specify):  (8) Unknown child safety seat type  (9) Unknown if child safety seat used	(11) Harness/shield/tether not used (12) Harness/shield/tether used (19) Unknown if harness/shield/tether used  Unknown If Designed With Harness/Shield/Tether (21) Harness/shield/tether not used (22) Harness/shield/tether used (29) Unknown if harness/shield/tether used (99) Unknown if child safety seat used

INJURY CONSEQUENCES	38. Working Days Lost <u>62</u>
34. Injury Severity (Police Rating)	Code the number of days (up through 60) that the occupant
<ul> <li>(0) O - No injury</li> <li>(1) C - Possible injury</li> <li>(2) B - Nonincapacitating injury</li> <li>(3) A - Incapacitating injury</li> <li>(4) K - Killed</li> <li>(5) U - Injury, severity unknown</li> <li>(6) Died prior to accident</li> </ul>	lost from work due to the accident (00) No working days lost (61) 61 days or more (62) Fatally injured (97) Not working prior to accident (99) Unknown
(9) Unknown	39. Time to Death
35. Treatment - Mortality (0) No treatment (1) Fatal (2) Fatal - ruled disease	Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, n days = 30 + n up through 30 days = 60)
Nonfatal (3) Hospitalization (4) Transported and released (5) Treatment at scene - nontransported (6) Treatment later	(00) Not fatal (96) Fatal - ruled disease (99) Unknown
(8) Treatment - other (specify):	40. 1st Medically Reported Cause of Death
(9) Unknown	41. 2nd Medically Reported Cause of Death
36. Type Of Medical Facility (for Initial Treatment) (0) Not treated at a medical facility (1) Trauma center (2) Hospital (3) Medical clinic (4) Physician's office (5) Treatment later at medical facility (8) Other (specify):	42. 3rd Medically Reported Cause of Death  Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death  (00) Not fatal or no additional causes  (97) Other result (specify):  (99) Unknown
(9) Unknown	43. Number of Recorded Injuries for This Occupant
37. Hospital Stay (00) Not Hospitalized Code the number of days (up through 60) that the occupant stayed in hospital. (61) 61 days or more (99) Unknown	Code the actual number of injuries recorded for this occupant. (00) No recorded injuries (97) Injured, details unknown (99) Unknown if injured

AUTOMATIC BELT SYSTEM	48. Automatic (Passive) Belt Failure Modes
44. Automatic (Passive) Belt System Availability/ Function (0) Not equipped/not available (1) 2 point automatic belts (2) 3 point automatic belts (3) Automatic belts - type unknown  Non-functional (4) Automatic belts destroyed or rendered inoperative	During Accident (0) Not equipped/not available/not in use (1) No automatic belt failure(s) (2) Torn webbing (stretched webbing not included) (3) Broken buckle or latchplate (4) Upper anchorage separated (5) Other anchorage separated (specify):  (6) Broken retractor (7) Combination of above (specify):
(9) Unknown  45. Automatic (Passive) Belt System Use	(8) Other automatic belt failure (specify):  (9) Unknown
(0) Not equipped/not available/destroyed or rendered inoperative (1) Automatic belt in use (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify):  (3) Automatic belt use unknown (9) Unknown	49. Seat Orientation (this Occupant Position) (0) Occupant not seated or no seat (1) Forward facing seat (2) Rear facing seat (3) Side facing seat (inward) (4) Side facing seat (outward) (8) Other (specify):
	(9) Unknown
(0) Not equipped/not available (1) Non-motorized system	TRAUMA DATA
(2) Motorized system (9) Unknown  47. Proper Use of Automatic (Passive Belt System (0) Not equipped/not available/not used (1) Automatic belt used properly (2) Automatic belt used properly with child safety seat	50. Glasgow Coma Scale (GCS) Score (at Medical Facility) (00) Not injured (01) Injured - not treated at medical facility (02) No GCS Score at medical facility (03-15) Code the actual value of the initial GCS Score recorded at medical facility. (97) Injured, details unknown (99) Unknown if injured
Automatic Belt Used Improperly (3) Automatic shoulder belt worn under arm (4) Automatic shoulder belt worn behind back (5) Automatic belt worn around more than one person (6) Lap portion of automatic belt worn on abdomen	51. Was the Occupant Given Blood? (1) No - blood not given (2) Yes - blood given (specify units): (9) Unknown if blood given
<ul> <li>(7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify):</li> <li>(8) Other improper use of automatic belt system (specify):</li> <li>(9) Unknown</li> </ul>	52. Arterial Blood Gases (ABG) – HCO <sub>3</sub> (00) Not injured  (01) Injured, ABGs not measured or reported  (02-50) Code the actual value of the HCO <sub>3</sub> (96) ABGs reported, HCO <sub>3</sub> unknown  (97) Injured, details unknown  (99) Unknown if injured
UPDATE CANDIDATI	E? NO[] YES[]
OCCUPANT INJURY FORM INCLUDED W	VITH INITIAL SUBMISSION? NO [ ] YES [ ]
*** ST IF THERE ARE N	OP HERE *** O RECORDED INJURIES



# **OCCUPANT ASSESSMENT LOG**

National Highway Traffic Safety Administration

TO BE COMPLETED BY TEAM	13. Injury Information Form Record
1. PSU Number  2. Case Number—Stratum  3. Researcher Completing Form  4. Vehicle Number  5. Occupant Number  6. Interviewer Number  7. Date Interview Completed  8. Occupant's Role (1) Driver (2) Passenger (3) Unknown	Official  a. Autopsy (invasive examination) b. Post-ER medical record which includes information about death based on non-invasive examination c. Admission record/summary of admission/discharge face sheet d. Discharge summary e. Operative report f. Radiographic record(s) post ER visit g. History and physical examination and/or consultation records h. Emergency room records i. Radiographic record(s) associated with ER visit j. Private physician  Unofficial k. Lay coroner I. EMS record m. Interviewee
9. Interviewee For This Occupant (0) No interview (1) Same person  Surrogate (2) Other occupant (3) Relative or friend	n. Other source (specify):  o. Police report  (See reverse side of this page for codes for variable 13)  14. Medical Facility Code
(4) Multiple interviewees from above categories (specify):	TO BE COMPLETED BY ZONE CENTER
10. Manner Of Interview (0) No attempt (1) Telephone (2) In-person (3) Questionnaire (9) Unknown (for Zone Center use only)	15. Documentation of Occupant Interview (Excludes Injury Data) (0) Not applicable (1) Substandard (2) Standard (3) Above Standard  DATA STATUS OF VARIABLE NUMBERS 4-52
11. Result Of Last Interview Attempt	4 5 6 7 8 9 10 11 12 13 14
(01) Unable to contact or locate (02) Hit and run (03) Fatal—surrogate not available (04) In intensive care—surrogate not available (05) Out-of-state resident (06) Refused interview	15 16 17 18 19 20 21 22 23 24 25
(07) Insurance company refusal (08) Attorney refusal or litigation	26 27 28 29 30 31 32 33 34 35 36
(09) No return of questionnaire (10) Other (specify):	
(11) Return of completed questionnaire (12) Partial interview	37 38 39 40 41 42 43 44 45 46 47
(13) Complete interview	
12. Injury Treatment Status  (0) No treatment  (1) Fatal—died before hospitalization  (2) Fatal—died after hospitalization  (3) Hospitalization  (4) Emergency room treatment only  (5) Treatment at physician's office  (6) Treatment at scene or self treatment  (7) Outpatient surgery  (8) Transported—unknown level of treatment  (9) Unknown	48 49 50 51 52  Data Status Codes:  (Blank) Correct (5) Sequencing error (7) Incorrect edit override (2) Non-correctable error (3) Correctable error (9) Unknown coded (4) Change—no error
	The state of the s

Administration

OCCUPANT INJURY FORM

Form Approved O.M.B. No. 2127-0021

NATIONAL ACCIDENT SAMPLING SYSTEM CRASHWORTHINESS DATA SYSTEM

Traffic Safety OCCUPANT INJURY FORM

1. Primary Sampling Unit Number

NEST

3. Vehicle Number

02

2. Case Number - Stratum

9209

4. Occupant Number

61

### **INJURY DATA**

Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the Occupant Injury Supplement.

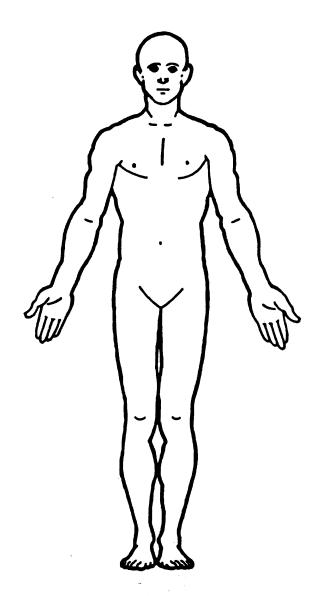
	Source	O.I.CA.I.S				Injury	<b>D</b> :			
	of Injury Data	Body Region	Aspect	Lesion	System Organ	A.I.S. Severity	Injury Source	Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion No.
1st	6. 7	6. <u>Q</u>	7. <u>L</u>	8. F	9. 5	10. <u>Z</u>	11.56	12. <u>l</u>	13. 👤	14.00
2nd	16. 🔼	18.	17. し	18. <u>F</u>	19.≤	20. 7	21.56	22	23	24.00
3rd	25	26	27	28	29	30	31	32	33	34
4th	36	36	37	38	39	40	41	42	43	44
5th	45	46	47	48	49	50	51	52	53	54
6th	<b>55.</b>	56	57	58	59	60	61	62	63	64
7th	66	66	67	68	69	70	71	72	73	74
8th	76	76	77	78	79	80	81	82	83	84
9th	85	86	87	88	89	90	91	92	93	94
10th	95	96	97	98	99	100	101	102	103	104

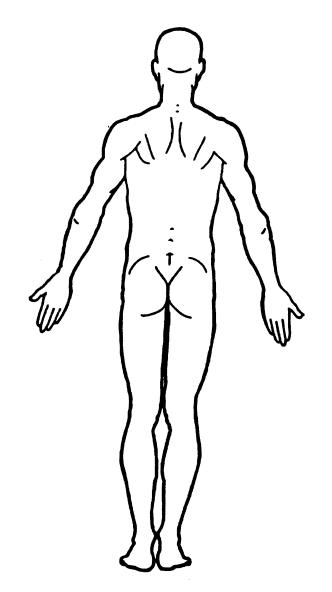
HS Form 433B (1/92)

This report is authorized by P.L. 89-563, Title 1, Section 106, 108, and 112. While you are not required to respond, your cooperation is needed to make the results of this data collection effort comprehensive, accurate, and timely.

# OFFICIAL INJURY DATA — SOFT TISSUE INJURIES

Indicate the Location, Lesion, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)





#### **SOURCE OF INJURY DATA** OFFICIAL

- (1) Autopsy records with or without hospital medical records
- (2) Hospital medical records other than emergency room (e.g., dishcarge summary)
- (3) Emergency room records only (including associated X-rays or other lab reports)
- Private physician, walk-in or emergency clinic

#### UNOFFICIAL

- (5) Lay coroner report
- (6) E.M.S. personnel
- (7) Interviewee
- (8) Other source (specify):
- (9) Police

### **INJURY SOURCE**

#### FRONT

- (01) Windshield
- (O2) Mirror
- (03) Sunvisor
- (04) Steering wheel rim
- (05) Steering wheel hub/spoke
- (06) Steering wheel (combination of codes 04 and 05)
- (07) Steering column, transmission selector lever, other attachment
- (08) Add on equipment (e.g., CB, tape deck, air conditioner)
- (09) Left instrument panel and below
- (10) Center instrument panel and below
- (11) Right instrument panel and below
- (12) Glove compartment door
- (13) Knee bolster
- (14) Windshield including one or more of the following: front header, Apillar, instrument panel, mirror, or steering assembly (driver side only)
- (15) Windshield including one or more of the following: front header. Apillar, instrument panel, or mirror (passenger side only)
- (16) Other front object (specify):

#### LEFT SIDE

- (20) Left side interior surface, excluding hardware or armrests
- (21) Left side hardware or armrest
- (22) Left A pillar (23) Left B pillar
- (24) Other left pillar (specify):
- (25) Left side window glass or frame

- (26) Left side window glass including one or more of the following: frame, window sill, A-pillar, B-pillar, or roof side rail.
- (27) Other left side object (specify):
- (28) Left side window sill

- (30) Right side interior surface, excluding hardware or armrests
- (31) Right side hardware or armrest
- (32) Right A pillar
- (33) Right B pillar
- (34) Other right pillar (specify):
- (35) Right side window glass or frame
- (36) Right side window glass including one or more of the following: frame, window sill, A pillar, B pillar, or roof side rail.
- (37) Other right side object (specify):
- (38) Right side window sill

#### INTERIOR

- (40) Seat, back support
- (41) Belt restraint webbing/buckle
- (42) Belt restraint B-pillar attachment point
- (43) Other restraint system component (specify):
- (44) Head restraint system
- (45) Air bag
- (46) Other occupants (specify):
- (47) Interior loose objects
- Child safety seat (specify): (48)
- (49) Other interior object (specify):

#### ROOF

- (50) Front header
- (51) Rear header
- (52) Roof left side rail
- (53) Roof right side rail
- (54) Roof or convertible top

### **FLOOR**

- (56) Floor (including toe pan)
- (57) Floor or console mounted transmission lever, including console
- (58) Parking brake handle
- (59) Foot controls including parking brake

#### REAR

(60) Backlight (rear window)

- (61) Backlight storage rack, door, etc.
- (62) Other rear object (specify):

### EXTERIOR of OCCUPANT'S VEHICLE

- (65) Hood
- (66) Outside hardware (e.g., outside mirror, antenna)
- (67) Other exterior surface or tires
  - (specify):
- (68) Unknown exterior objects

#### EXTERIOR OF OTHER MOTOR VEHICLE

- (70) Front bumper
- (71) Hood edge
- (72) Other front of vehicle (specify):
- (73) Hood
- (74) Hood omament
- (75) Windshield, roof rail, A-pillar
- (76) Side surface
- (77) Side mirrors
- (78) Other side protrusions (specify)
- (79) Rear surface
- (80) Undercarriage
- Tires and wheels (81)
- (82) Other exterior of other motor vehicle (specify):
- (83) Unknown exterior of other motor vehicle

### OTHER VEHICLE OR OBJECT IN THE

### **ENVIRONMENT**

- (84) Ground
- (85) Other vehicle or object (specify)
- (86) Unknown vehicle or object

### NONCONTACT INJURY

- (90) Fire in vehicle
- (91) Flying glass
- (92) Other noncontact injury source (specify):
- (93) Air bag exhaust gases
- (97) Injured, unknown source

### INJURY SOURCE CONFIDENCE LEVEL

- (1) Certain
- (2) Probable
- (3) Possible
- Unknown

### DIRECT/INDIRECT INJURY

- (1) Direct contact injury
- (2) Indirect contact injury
- Noncontact injury
- Injured, unknown source

### OCCUPANT INJURY CLASSIFICATION

### O.I.C. Body Region

- Abdomen
- (Q) Ankle-foot
- (A) Arm (upper) Back-thoracolumbar spine (B)
- (C) Chest
- (E) Elbow
- (F) Face
- (R) Forearm
- (H) Head-skull Injured, unknown region
- (U)
- Knee (K) Leg (lower) (L)
- (Y) Lower limbs(s) (whole or
- unknown part) (N) Neck-cervical spine
- Pelvic -- hip (P)
- (S) Shoulder m Thigh
- (X)
- Whole body Wrist-hand
- Upper limb(s) (whole or unknown part)

- Aspect of Injury (A) Anterior - front
- Bilateral (rib fracture only) (B)
- (C) Central (1) Inferior-lower
- (U) Injured, unknown aspect
- (L) Left (P) Posterior-back
- (R) Right
- (S) Superior-upper Whole region (W)
- Lesion
- Abrasion
- (M) **Amputation**
- Avulsion (V) (B) Burn
- (K) Concussion
- (C) Contusion (N) Crush
- (G) Detachment, separation

Dislocation

- Fracture
- (Z) Fracture and dislocation
- an Injured, unknown lesion
- (L) Laceration (0) Other
- (P) Perforation, puncture
- (R) Rupture (S) Sprain
- (T)Strain Total severance, transection
- (E) System/Organ
- (W) All systems in region
- (A) Arteries - veins (B) **Brain**
- Digestive (D) (E) Fars
- (0) Eye
- (U)
- (1)
- (J) Joints (K) Kidnevs

81

(H) Heart Injured, unknown system Integumentary

- (1) Liver
- (M) Muscles (N)
- (P) Pulmonary-lungs
- Respiratory
- (S) Skeletal Spinal cord (C)
- (Q) Spleen (T) Thyroid, other endocrine gland

# Abbreviated Injury Scale

- (2) Moderate injury
- (3) Seriour injury
- (5) Critical injury
- Injured, unknown severity

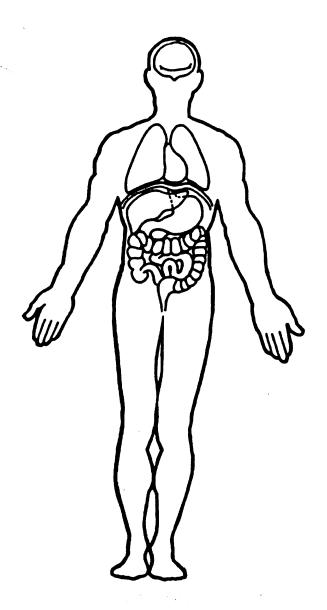
Nervous system

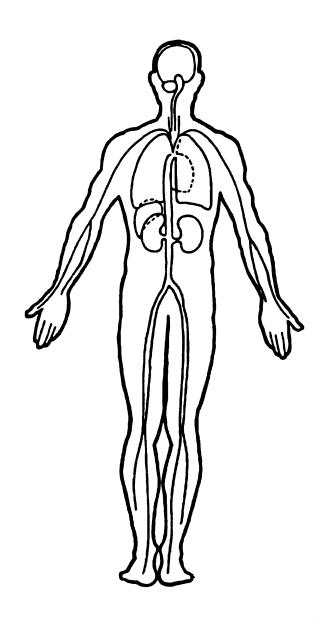
- (4) Severe injury
- (6) Maximum (untreatable)

# OFFICIAL INJURY DATA — SKELETAL INJURIES Restrained? Indicate the Location, Lesion, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.) **Blood Alcohol** Level (mg/dl) BAL = Glasgow Coma Scale Score GCSS = Units of Blood Given Units = **Aterial Blood** Gases PCO, HCO<sub>3</sub>

### OFFICIAL INJURY DATA —INTERNAL INJURIES

Indicate the Location, Lesion, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)





Administration

U.S. Department of Transportation National Highway Traffic Safety

**OCCUPANT INJURY FORM** 

Form Approved O.M.B. No. 2127-0021

NATIONAL ACCIDENT SAMPLING SYSTEM CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

NOST

3. Vehicle Number

02

2. Case Number - Stratum

9204

4. Occupant Number

02

### **INJURY DATA**

Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the Occupant Injury Supplement.

	Source		O.I.CA.I.S					Injury Source	Discot		
	of Injury Data	Body Region	Aspect	Lesion	System Organ	A.I.S. Severity	Injury Source	Confidence Level	Direct/ Indirect Injury	14. 99 24. 02 34. 02 44 54 84 84	Occupant Area Intrusion No.
1st	5. —	6. 💟	7. <u>P</u>	8.F	9.5	10.2	11.97	12. 🖰	13. 7	14. <u>99</u>	
2nd	15. 7	16	17. <u>L</u> (	18. 🚅	19.4	20. 7	21	22. ]	23	24. 🛛 🖳	
3rd	25	26. 💆	27. <u>L</u>	28. <u>U</u>	29. 🖳	30. <u>7</u>	31. 1	32. ⊥	зз. <u>Т</u>	34. <u>D</u> 2	
4th	35	36	37	38	39	40	41	42	43	44	
5th	45	46	47	48	49	50. <u> </u>	51. <u> </u>	52. <u> </u>	53	64	
6th	55	56	<b>57.</b>	58. <u> </u>	59	60	61	62	63	64	
7th	65	66	67	68	69	70	71	72	73	74	
8th	75	76	77	78	78	80	81	82	83	84	
9th	86	86	87	88	89	90	91	92	93	94	
10th	95	96	97	98	99	100	101	102	103	104	

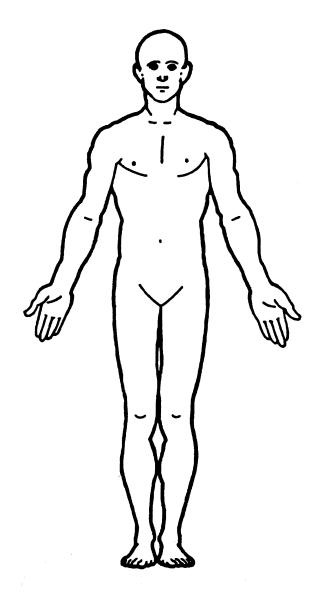
HS Form 433B (1/92)

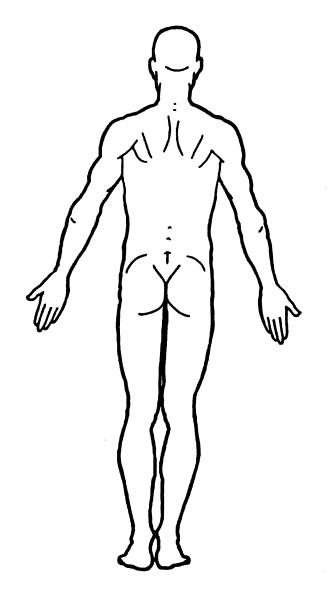
This report is authorized by P.L. 89-563, Title 1, Section 106, 108, and 112. While you are not required to respond, your cooperation is needed to make the results of this data collection effort comprehensive, accurate, and timely.

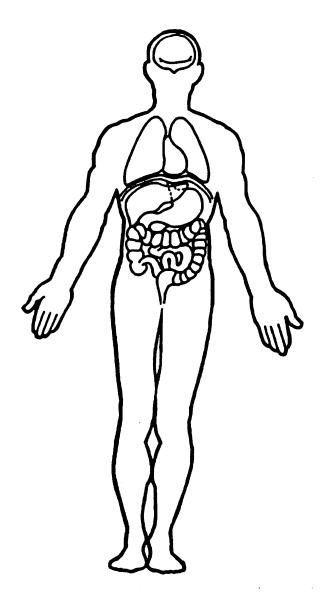
85

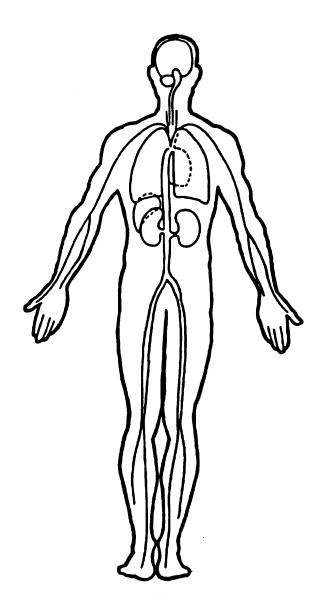
# OFFICIAL INJURY DATA — SOFT TISSUE INJURIES

Indicate the Location, Lesion, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)









Appendix C

Airbag Supplement

Dup. Cols. 1-8 Module A B	Form	at <u>Q 1</u>	AIRBAG SUPPLEMENT	AB
ACCIDENT SUMMARY		AIRBAG Y	EHICLE INSPECTION	-
ACCIDENT DATE		DATE VEH	. INSPECTED	19
POLICE INVESTIGATED (1,2,9)*	1_	REASON VI	EHICLE NOT INSPECTED	
City County  GENERAL LOCALITY  (1) Freeway, Limited Access (2) Urban (City) (3) Urban-Rural (mixed)	4_	(2) Canno (3) Repa	ection Completed of be Located** ired or Destroyed** al or impounded** r*	1
(4) Rural, Fields	2	1 1	ATA OBTAINED	4
CONFIGURATION (First Harm)  (0) Struck Object or Pedestrian (1) Rear-End (2) Head-On (3) Rear-to-Rear (4) Angle (5) Sideswipe-Same Direction (6) Sideswipe-Opposite Direct. (7) NonColl:eg Fell from Veh (8) NonImpact Deployment (9) Unknown  FIRE INVOLVED (0) None (1) AirBag Vehicle (2) Other Vehicle (3) Both Vehicles (9) Unknown  NUMBER: VEHICLES INVOLVED (8)=8 or more	0 3 3 7	(1) CDC (2) Crus(3) Traje (4) CDC (5) CDC (6) Crus(7) CDC,  BASIS OF (0) Not (1) CRAS(2) CRAS(3) Miss (4) Yield (5) Unknot (6) One (7) Coll (8) Insu	h Profile Only ectory Data Only and Crush Profile and Trajectory h and Trajectory Crush & Trajectory  DELTA-V  Computed (Unknown Why) H - Damage Only H - Damage+Trajectory Ing Vehicle Algorithm ding Object Algorithm own Basis Vehicle Beyond Scope ision Beyond Scope fficient Data	L
PERSONS INVOLVED INJURED PERSONS	2	VEHICLE		9
MAXIMUM AIS IN ACCIDENT	7	ANY PRI	AG VEHICLE BEEN IN OR IMPACTS (1,2,9)*	-
OTHER VEHICLE: MAXIMUM AIS	F-ATAL		PRIOR MAINTENANCE/SERVIOR RFORMED ON SYSTEM(1,2,9)	E G
PRIME/DEPLOY IMPACT w AB VEH: EVENT NUMBER	1	*Uescrib	8:	
CDC 12-EDEW-6				
TOTAL DELTA-V	43	AIRBAG Y	EHICLE: FLEET RENTAL	M
Model Year, Make, Model, Body Ty	pe:	:	VIN	
92 CHEVROLET CORSICA	gag de Ngallang salangga	M	ILEAGE 4045.5	
* (1)=Yes, (2)=No, (9)=Unknown	8	<u> </u>	RAFT - 09/( BEST AVAILABLE COPY	

SYSTEM READINESS LAMP In Instrument Cluster)		AIRBAG VEHICLE FIRST HARMFUL EVENT	13
PRE-IMPACT LAMP CONDITION  (1) Functioning/ProvedOut  (2) Inoperative  (9) Unknown	<u>'</u>	(01) Fire or explosion (02) Immersion (03) Gas Inhalation (04) Fell from vehicle (05) Injured in vehicle (06) Other noncollision (specify):	
DRIVER'S REPORT OF PRE-IMPACT FLASHING  (00) No Flashing Reported (01) Continuous Flashing (02) >Number of Flashes (11) (12) Constant Light (19) Flashing, Unkn Number (88) Not App (system removed) (99) Unknown	43	(07) Overturn (08) Jackknife with intraunit damage Collision With: (09) Pedestrian (10) Pedalcyclist (11) Railway train (12) Animal (13) Motor vehicle in transport (same roadway) (14) Motor vehicle in transport (other roadway) (15) Parked motor vehicle (16) Other type nonmotorist (specify):	
PERIOD OF PRE-IMPACT FLASHING  (0) No Flashing (1) Same Day as Impact (2) Prior Day (3) Prior Two Days (4) Prior Week (5) Prior Month (6) Over One Month (9) Unknown	-	(17) Thrown or falling object (18) Boulder Collision with Fixed Object: (20) Building (21) Impact attenuator/Crash Cushion (22) Bridge pier or abutment (23) Bridge parapet end (24) Bridge rail (25) Guardrail (26) Concrete traffic barrier (27) Median barrier (28) Other longitudinal barrier (specify): (29) Highway/Traffic sign post	
POST-IMPACT LAMP CONDITION  (1) Functioning/ProvedOut (2) Inoperative (9) Unknown	2-	(30) Overhead sign support (31) Luminaire/Light support (32) Utility pole (33) Other post, pole, or support (specify): (34) Culvert (35) Curb (36) Ditch	
POST-IMPACT FLASHING  (00) No Flashing (01) Continuous Flashing (02)  >Number of Flashes (11) (12) Constant Light (19) Flashing, Unkn Number (88) Not Appl (removed) (99) Unknown	99	<ul> <li>(37) Embankment-earth</li> <li>(38) Embankment-rock, stone or concrete</li> <li>(39) Fence (wooden, wire, chain link, etc.)</li> <li>(40) Wall (stone, rock, metal, etc.)</li> <li>(41) Fire hydrant</li> <li>(42) Shrubbery</li> <li>(43) Tree</li> <li>(44) Other fixed object (specify):</li> <li>(45) Pavement surface irregularity (pothole, grooved, grates)</li> <li>(99) Unknown</li> </ul>	

AB-

AIRBAG SY	STEM	DANAG
-----------	------	-------

ODES:

- (1) Yes, Damaged\*
- (2) No, Intact
  (8) Not App.(Removed)
- (9) Unknown

AIRBAG MODULE

SENSORS: Left Front

Center Front

Right Front

Rear, Cowl

DIAGNOSTIC MODULE

WIRING

KNEE DIVERTER

INDICATION OF DISCONNECTED OR LOOSE ELECTRICAL CONNECTORS

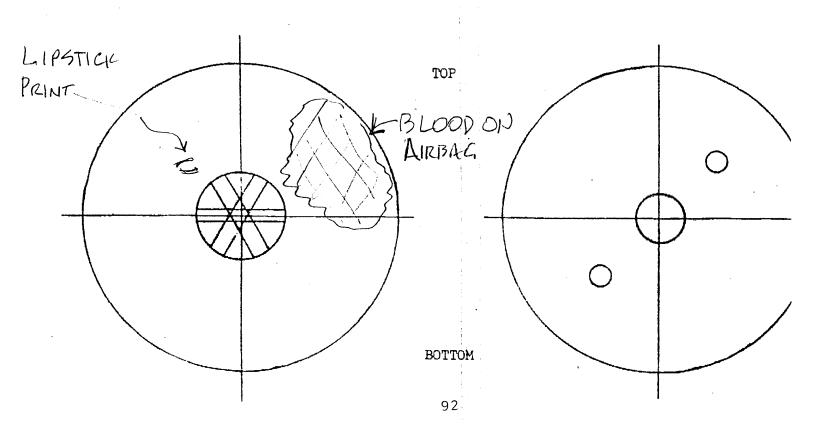
CONDITION OF DEPLOYED BAG

- (1) Bag Intact
- (2) Split or Torn\*
- (3) Cut by Object in impact\* (4) Cut after Accident\*
- (5) Other (e.g., burned)\*
- (8) N/A (not deployed)
- (9) Unknown

**\*DESCRIBE** System and Bag Damage:

NOTE DAMAGE AND CONTACT MARKS ON AIRBAG DIAGRAMS BELOW:

229199222



#### AIRBAG SUPPLEMENT

**AE** 

OCCUPANTS of AIRBAG CAR  NUMBER OF OCCUPANTS IN VEHICLE (8) 8 or more  NUMBER OF INJURED PERSONS  MAXIMUM AIS IN AIRBAG VEHICLE (0) No Injury (1-6) AIS Severity (7) Injured, Unknown Severity (9) Unknown	2 2 1 FATAL	NOTES:
NUMBER OF DRIVER INJURIES  SOURCE OF BEST INJURY DATA  (0) Not injured (1) Autopsy w/wo med. records (2) Hospital Medical Records (3) Emergency Room only (4) Private physician, Clinic (5) Lay Coroner Report (6) EMS Personnel (7) Interviewee (8) Police (9) Unknown	27	
MAXIMUM AIS BY BODY REGION		
REGION MAX AIS CON Head/Neck/Face	NTACT	
Chest 1		
Abdomen		
Leg/Hips 2		
Other (Arms)		•
DRIVER MAXIMUM 2 5	<u> </u>	
EJECTION: Extent		

DRIVER-PASSENGER	AIRBAG SUPPLEMEN	T AB-6
DRIVER BELT USAGE: (1) Used (2) Not Use  Evidence: BELTS CUT FOR EXTRICATI		
Evidence: 12cli (11 For Ox /kic+1)	000	
DRIVER POSTURE: Any Comments Recorded (	1) Yes, (2) No	1-
Describe driver's posture and position on seat on head, torso, buttocks, legs and feet. Also no Dld driver brace before crash? Describe:	including specific of the hand and arm po	comment sition
DRIVER SUPPORON FARETURES	OF BOTH HE	225
DRIVER FOREIGN OBJECTS: Comments Recorded (1) Ye	es. (2) No	<del></del> 2
Was driver wearing contact lenses or eyeglasses object at the time of the impact (packages on incigarette, etc.)? Did any lenses, objects, or justice.	an, pine, food, bot	tie.
DRIVER COMMENTS: Comments Recorded (1) Y	es, (2) No	2
Was the driver aware that the vehicle was equip restraint system? Did driver offer any comment Did the driver comment on the airbag as a restr	s on smoke noise	a+~ ?
PASSENGER-AIRBAG CONTACT (1) Yes, (2) No, (9	) Uńknown	1
Describe: BLOOD ON BAG	,	DANCESTA, Discollaria

Appendix D
Newspaper Article

# Dr. Landed noted pastor, dies in crash

## Colorado wreck claims 2 others

Leichen ection

The Rev.

- the pastor for 21

to President in a head-on car crash near Colo.

crash neat Colo.

73; pastor of a limit of the color of t

The State Patrol reported was: killed was: killed driven by drifted across the center line of Highway about three miles east of the and hit the wehicle head-on.

and her husband,

the car was driven by his wife, 52, who was alded by a driver's side air bag. Both

was listed in stable condition with a broken heel at Medical "Center in afternoon afternoon it spun 180 degrees and hit another car, according to the cocupant of that car was not injured.

There's no way to prove it, but it is my opinion at this point that she went to sleep at the wheel,"

about 55 mph, the pavement was dry and the sun was shining at the

retired executive secretary of the served two terms as chairman of the commission.

when and his family joined it in 1977.

Please see PASTOR, page A5

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Continued from page A1

years and dean of the School of the for 12 years before he moved to also was the author of at least four books.

"He was loved and revered by the congregation and the community at large," said secociate pastor at Baptist in who was a staff member of the church during

to implement to years ago and became pastur of the non-de-nominational

He also was a two-term member of the executive committee of the Ha

He was an outspoken proponent of civil rights and was anpointed by to a committee investigating racial turnoil in

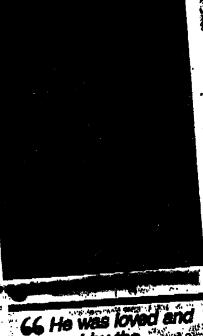
but his parents moved in and he graduated from and was graduated from and was graduate of

He held a doctorate of theology from

opinion at this point that she (the other driver) went to sleep at the wheel. ??

torate in moral philosopy from the

He served as a pastor in



revered by the congregation and the community at large. 99

gion at a professor of reprofessor of systematic theologat

theology at rector of that department with a moved to

In addition to his war layer his war war war an amount processo madicine at in Bo in Bo is survived by second wife,

Funeral arrangements at complete.

Appendix E
CRASH 3 Output

#### NOSI AIRBAG CASE 92-04

### SPEED CHANGE (DAMAGE)

 VEHICLE #1
 66 KPH ( 41 MPH)

 TOTAL
 66 KPH ( 41 MPH)

 LONGITUDINAL
 -66 KPH ( -4 MPH)

 LATITUDINAL
 -6 KPH ( -4 MPH)

 PDOF ANGLE
 5 DEGREES

 ENERGY DISSIPATED = 229949 JOULES ( 169579 FT-LB)

VEHICLE #2

 TOTAL
 70 KPH ( 43 MPH)

 LONGITUDINAL
 -70 KPH ( -43 MPH)

 LATITUDINAL
 6 KPH ( 4 MPH)

 PDOF ANGLE
 -5 DEGREES

ENERGY DISSIPATED = 229949 JOULES ( 169579 FT-LB)

#### DAMAGE DATA

	VEHICLE #1	VEHICLE #2
SIZE CATEGORY		3
STIFFNESS CATEGORY 'EHICLE WEIGHT	9 1260 KGS ( 2777 LBS)	9 1197 KGS ( 2 <b>638 LBS)</b>
CDC	12FDEW6	12FDEW6
PDOF AMBLE	5 DEGREES	-5 DEGREES
CRUSH LENGTH	132 CM. ( 52 IN.)	132 CM. ( 52 IN.)
C1	36 CM. ( 14 IN.)	36 CM. ( 14 IN.)
C2	53 CM. ( 21 IN.)	53 CM. ( 21 IN.)
C3	76 CM. ( 30 IN.)	76 CM. ( 30 IN.)
C4	94 CM. ( 37 IN.)	94 CM. ( 37 IN.)
CS	112 CM. ( 44 IN.)	112 CM. ( 44 IN.)
C6	152 CM. ( 60 IN.)	152 CM. ( 60 IN.)
D	13 CM. ( 5 IN.)	13 CM. ( 5 IN.)
Di	26 CM. ( 10 IN.)	26 CM. ( 10 IN.)

(\* INDICATES DEFAULT VALUE

#### DIMENSIONS AND INERTIAL PROPERTIES

	VEHICLE #1	VEHICLE #2
JG TO FRONT AXLE	130 CM. ( 51 IN.)	130 CM. ( 51 IN.)
CG TO REAR AXLE	141 CM. ( 56 IN.)	141 CM. ( 56 <b>IN.</b> )
TRACK	150 CM. ( 59 IN.)	150 CM. ( 59 IN.)
CG TO FRONT OF VEH	228 CM, ( 90 IN.)	228 CM. ( 90 IN.)
CG TO REAR OF VEH	-270 CM. (-106 IN.)	-270 CM. (-106 IN.)
CG TO SIDE OF VEH	92 CM. ( <b>36 IN.</b> )	92 CM. ( 3 <b>6 IN.</b> )
MOMENT OF INERTIA	10887 KGS ( 24001 LBS)	10342 KGS ( 22 <b>800 LBS)</b>
VEHICLE MASS	3 KGS ( 7 LBS)	3 KGS ( <b>7 LBS</b> )